IJ.S.I. JOURNAL

INDIA'S OLDEST JOURNAL ON DEFENCE AFFAIRS
(Established: 1870)



PRINCIPAL CONTENTS

Indo-Pak War 1971—Some Reflections Indo-Soviet Relations under Kosygin Approach to Tactics

Commanding Officer and His
Team
Junior Leadership Training
Rethinking Mechanized Infantry
Concepts

Fear and Its Effects on Combat Efficiency Major General S.N. Antia

M.S. Dahiya Major General O.S. Kalkat, PVSM

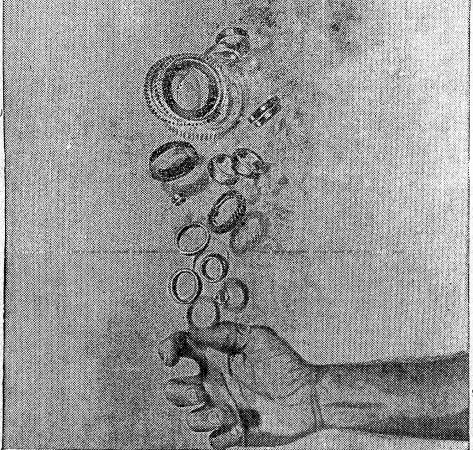
Lieut Colonel Y.A. Mande Major S.J.S. Ahluwalia, PSC

Ravi Rikhye

Squadron Leader K.N. Parik

APRIL-JUNE 1972

What can a team of young engineers and workmen do in 6 weeks with just Rs. 35 lakhs in foreign exchange?



Save the country Rs. 2.5 crores in foreign exchange every year.

Just Rs. 35 lakhs in foreign exchange for a Ring Rolling Mill which will be saving the country imports worth Rs. 2.5 crores in every year of full production when it will roll two million pieces of rings ranging from 90mm to 200mm and weighing upto 6 kg, for anti-friction bearings.

automobile and other engineering industries.

The first of its kind in India, this Mill was erected and commissioned within six weeks of getting the equipment at site. Without any foreign expert. By a team of engineers with an average age of 26.

Dur strength is in our people as much as in our steel. TATA STEEL TN. 3974 (A)



The

JOURNAL

of the

United Service Institution

of

India

Published by Authority of the Council



(Established: 1870)

Postal Address:

'KASHMIR HOUSE', KING GEORGE'S AVENUE, NEW DELHI-11

Telephone No: 375828

Vol. CII

APRIL-JUNE 1972

No. 427

USI Journal is published quarterly in April, July, October and January. Subscription: Rs. 20 per annum. Single Copy: Rs. 5, Foreign (Sea Mail) \$ 2.00 or Sh 12.50. Subscription should be sent to the Secretary. It is supplied free to members of the Institution. Articles, Correspondence and Books for Review should be sent to the Editor. Advertisement enquiries concerning space should be sent to the Secretary.

UNITED SERVICE INSTITUTION OF INDIA

for

the furtherance of interest and knowledge in the art, science and literature of the Defence Services

Patron

The President of India

Vice Patrons

Governor of Andhra Pradesh Governor of Assam & of Nagaland Governor of Bihar Governor of Gujarat Governor of Haryana Governor of Himachal Pradesh Governor of Jammu & Kashmir

Governor of Kerala

Governor of Madhya Pradesh Governor of Maharashtra Governor of Mysore

Governor of Orissa Governor of Puniab Governor of Rajasthan Governor of Tamil Nadu Governor of Uttar Pradesh Governor of West Bengal

Lt. Governor of Delhi Lt. Governor of Goa, Daman and Diu Lt. Governor of Manipur

Lt. Governor of Tripura Shri Jagjivan Ram, Minister of Defence General S.H.F.J. Manekshaw, MC, Chief of the Army Staff Admiral S.M. Nanda, PVSM, Chief of the Naval Staff Air Chief Marshal P.C. Lal, DFC, Chief of the Air Staff

Air Marshal Shivdev Singh, PVSM, Vice Chief of the Air Staff

Vice Presidents

Vice Admiral J. Cursetji, PVSM, Vice Chief of the Naval Staff Lieut General Har Prasad, Vice Chief of the Army Staff

Elected Members of the Council

Brigadier N.B. Grant (Retd) Lieut General Harbakhsh Singh, vr.c. (Retd) Captain Kirpal Singh, AVSM, IN Lieut General R.A. Loomba, PVSM (Retd) Lieut General Moti Sagar, PVSM (Retd) Lieut General N.S. Nair, PVSM Brigadier J. Nazareth Lieut General R.S. Noronha, PVSM, MC Major General M.R. Rajwade, vsm, MC Lieut General Sartaj Singh, GM Group Captain K.D. Singh, AVSM Lieut General M.L. Thapan

Representative Members

Major General A.M. Vohra, Director of Military Training Captain K.K. Nayyar, IN, Director of Naval Training Air Cdre A. Suares, VR.C. and Bar, Director of Training (Air HQ)

Ex-Officio Members

Shri K.B. Lall, ICS, Secretary, Ministry of Defence Air Marshall H. Moolgavkar, MVC,

Commandant, National Defence College

Major General R.K. Ranjit Singh, Commandant, Defence Services Staff College Shri D.S. Nakra, Financial Advisor, Ministry of Defence

Executive Committee

Major General A.M. Vohra Shri P. Krishnamurti Captain K.K. Nayyar, n Air Cdre A. Suares, VR.C. and Bar Lieut General Moti Sagar, PVSM (Retd) Shri P.S. Kohli

20.1 Secretary and Editor Colonel Pyara Lal, AVSM

CONTENTS

APRIL - JUNE 1972

INDO-PAK WAR 1971 - SOME		
REFLECTIONS	Major General S.N. Antia	109
Indo-Soviet Relations under Kosygin	M.S. Dahiya	119
Approach to Tactics	Major General O.S. Kalkat, PVSM	129
COMMANDING OFFICER AND HIS TEAM	Lieut Colonel Y.A. Mande	145
JUNIOR LEADERSHIP TRAINING	Major S.J.S. Ahluwalia, PSC	157
RETHINKING MECHANIZED INFANTRY CONCEPTS	Ravi Rikhye	163
FEAR AND ITS EFFECTS ON COMBAT EFFICIENCY	Squadron Leader K.N. Parik	169
METEOROLOGY AND WAR	Group Captain S. Das Sarma	174
ORIGIN OF SUMMARY COURT MARTIAL	Major M.P. Singh	183
BOOK REVIEWS		187
Supreme Commander 1941- Pakistan (ATC); Master and in Korea (Kay); Swords for Eighteenth Century India (KD); Royal Australian N	O STATES AND ASIA (VS); WAY 1943 (Kay); CONFRONTATION V O COMMANDER (Kay); THE SEA R HIRE: EUROPEAN MERCENARIE (ATC); THE LIGHTNING CAMP. IAVY 1942-1945 (Kay); THE BRI SURVEY (Kay); DELHI CAPITAL	WITH WAR S IN AIGN ITISH
CORRESPONDENCE		199
SECRETARY'S NOTES		201
Additions to the USI Library		209

NOTE

The views expressed in this Journal are in no sense official and the opinions of contributors in their published articles are not necessarily those of the Council of the Institution.

Socialistic Democracy is the only true Democracy.

Each part of the community exists for the good of all, and not for its own separate interests. This spirit can give humanity as a whole the necessary conditions in which it can turn its best energies to its higher development.

-Sri Aurobindo



INDO - PAK WAR 1971 SOME REFLECTIONS

MAJOR GENERAL S N ANTIA

HEN on December 16 and 17, 1971 over a lakh of Pakistani troops unconditionally surrendered in Bangla Desh to General Aurora, and General Yahya Khan accepted our Prime Minister's unilateral ceasefire in the West, India fully redeemed her national honour. Ironically, it was left to Mrs. Gandhi not so much as the daughter of Jawaharlal Nehru but in her own indisputed and unchallengeable right as the Prime Minister of a great country, to wipe off the humiliation the country suffered in 1962. No more should we now harp back on the events of that fateful year. It is a chapter of the past only to be relegated to the back yard of history. The cause for which the nation was forced to take up arms has been fully vindicated. The new-born nation of the Republic of Bangla Desh is a reality which the world just cannot ignore notwithstanding the childish petulance of some of the Big Powers.

In redeeming the honour of our country, India's Armed Forces have played a notable and significant role. The epic and heroism of the 14-day war have been widely reported in the press and other communication media both at home and abroad. For a more detailed, authentic and accurate overall assessment of the military campaign, we shall have to wait for some more time when the despatches from the Field Commanders are compiled, sifted, co-ordinated and critically examined. Still, it is possible to undertake objectively a broad analysis of some of the major military lessons which have become apparent as a result of the conflict.

SENSE OF TIMING

The first aspect which emerges clearly is the sense of timing of decision-making at political and military levels towards a final count-down in Bangla Desh. It will be recalled that ever since March 25, 1971 with the Pak Army's barbarous and inhuman military crack-down on unarmed and innocent civilians of Bangla Desh and with the influx of millions of refugees

pouring across our borders, there was a spontaneous public demand that the Government of India recognise Bangla Desh. An influential section of public opinion was of the view that India should have gone to war with Pakistan at that time. There was a feeling also that the Defence Services were not fully prepared for a fullscale war at that time and, therefore, they were dragging their feet which in turn led the Government into inactivity to force a military decision on Pakistan. Mrs. Gandhi and her Government had wisely and understandably refrained from being hustled into any premature decision on either of these public demands. Any hasty decision of recognising Bangla Desh would have isolated us politically which would have been against the interests of our country as well as those of Bangla Desh. Any premature military action at that time would have branded us as aggressors apart from serving Pakistan's cause more than ours. Strategically any military operations undertaken in the midst of flow of large number of refugees and taking into account the prevailing terrain, climatic and other conditions and the possibility of armed intervention by the Chinese, which would have entailed conducting war on three fronts simultaneously, would have been militarily unsound. Subsequent events have fully vindicated the Governmet's stand. For the first time in the chequered history of our country, our national aims and objectives have been systematically woven into cohesive actions both at planning and execution stages. This has brought for our country significant political and military victories and advantages.

The second lesson which emerges is the conduct of higher direction of war. Here again, unlike in the past, the Government had given the Chiefs of Staff a clear-cut and militarily attainable strategic directive. The aims and objectives given were not only realistic, but were well within the resources and capabilities of the Armed Forces. This was the first time when strategic military aims and objectives were taken as an extension of our national interests, political aims and policies. The Government, unlike in the past, had given adequate time to the Services to plan for any contingent operations whilst it retained the political initiative for anultimate political solution. At the same time, it kept its options open to undertake any military action should the Pakistan military junta be foolish enough to launch an aggression on our territory. Events have further proved that it was not for want of political efforts on the part of the Government that we had to resort to military action. It was only when a deliberate aggression was committed against us that our Armed Forces were committed to battle. The timing for both political and military actions were chosen correctly which was most advantageous to us. The ultimate result has been a well planned, integrated effort at all levels. Once aggression was

committed against us, our Armed Forces operated as a well-oiled machine and as a single entity. The important aspect is that once the Government had formulated its national aims and objectives, prosecution of the war effort was entirely left to the Service Chiefs unlike in the past. This is also the first time where there was justifiable confidence between the Cabinet and the Chiefs of Staff and vice versa. At every stage of the war, there was perfect understanding between the political aims and military attainments in the higher direction of war. Now that such a healthy and workable precedent has been established which has proved its mettle during the war, it would be desirable to consolidate the decision-making process at governmental level in the shape of establishing permanently a National Security Council or Authority to further strengthen the descision-making processes in the higher direction of war. As a corollary to this, at the Armed Forces level too, much toil and sweat has gone towards planning, coordination and the final execution of the war effort jointly by the Chiefs of Staff to a very successful conclusion. There has been a perfect inter-Services effort at all echelons of the Armed Forces from Service Headquarters right down the chain of command to unit level. The Chiefs of Staff Committee, therefore, deserve a better deal than as presently constituted purely as an advisory body. The Government would do well to infuse this important Committee with executive powers so that it functions in its rightful and legitimate role on all defence matters both in war and peace and charged with the executive responsibilty for the conduct of operations during an emergency as a single entity. The Joint Chiefs of Staff concept with a permanent Chairman would not only be highly desirable but is a vital necessity as a long-term policy. The greater the authority this Committee will have, the greater will be the effectiveness and efficiency of the Armed Forces.

CORRECT POLICY

In the past, the Government was circumscribed by a defensive posture and our Armed Forces were somewhat restrained from taking the war deep into enemy territory mainly due to our sensitiveness to international pressures. This time, the accent has been on the offensive not only to drive back the enemy across our borders but to fight the war on his own territory. For a country like Pakistan which had been emboldened to launch an aggression across our frontiers four times within the last 25 years after Independence, the policy adopted by the Government was the correct one. The result of such a bold and far-sighted policy has brought rich dividends and gives us both politically and militarily sufficient room to manoeuvre during the crucial talks which are bound to follow soon on the adjustments of

bomdanies and other vital allied issues of national interest. Even in defensive battles due to the Government's policy, our Commanders in the field were infused with offensive spirit and thus we have been able to achieve decisive military results as planned. It is hoped that this policy for the Armed Forces has come to stay for future.

The principles of war of concentration and economy of force were applied during the recent war. Politically and militarily, our major aim and objective was the liberation of Bangla Desh in the shortest time and the defeat of Pakistan's occupation army in the East. The deployment of greater military resources was naturally allotted to the Eastern Army. The military strategy was, therefore, quite clear; to liberate Bangla Desh in the shortest possible time before any U.N. or other intervention could take place while in the western sector to keep the Pakistani Army in a holding action with the accent on offensive defence; to divide the enemy into two major portions and to deal with him piecemeal with superior forces at any one time at a time and place of our choosing was a sound strategical and tactical concept. We have, therefore, in a classical military manner done just that to achieve decisive military results both in the East and West. There is no doubt in any one's mind, including those of certain Super Powers, that had the war in the West been prolonged by the military junta of Pakistan, they would have suffered a decisive military defeat of equal magnitude as in the East. May be this lesson has not yet been fully digested by President Bhutto and he would do well to ponder over it before he makes any further jingoistic pronouncements.

It would be invidious or churlish to single out any one Service for our victory—nor would any one of the Services themselves like to take this credit. All throughout the conflict, the emphasis was on a tri-Service co-ordination and unity which has never before been experienced or achieved in this country during a war. The achievement of air superiority in the East within 48 hours after the war had commenced, the control of the skies in the West, the blockade of sealanes, the actions of the Navy in the Arabian Sea and the Bay of Bengal, the maintenance of the momentum of advance in Bangla Desh in spite of difficult terrain, the swift and hard battles fought by the Army on land both in the East and West supported by effective close air and naval support have given the three Services new confidence and new dimensions in co-ordinated actions at all levels. This is the result of perfect planning, co-ordination and execution of professional skills motivated by the highest pitch of military efficiency. If this is the trend which was experienced in the last conflict, perhaps the idea of a single integrated Defence Service with one uniform and one tactical doctrine might become a reality some day in our country provided inter-Service prejudices and rivalries, which understandably exist, are shed in the greater interest of the nation as well as the Armed Forces themselves.

INSPIRING LEADERSHIP

Another important lesson which emerges is the quality and the type of leadership provided in this country during the war at all levels. Primarily the leadership provided by our Prime Minister, Mrs. Gandhi, was inspiring. Even till the very last moment, in her cool, calm and collected manner, she held the nation as one entity and tried her level best to persuade the world powers to see the Bangla Desh problem in its right and correct perspective. Had the military junta of Pakistan in sheer desperation not launched any aggression against us, it is clear that Mrs. Gandhi would still have, with her restraint, patience and wise statesmanship, achieved a genuine political settlement with honour and dignity to India and Bangla Desh. The leadership provided at the Armed Forces level too was conspicuous. Unlike in 1965, when during the war some of the field Commanders were summarily removed from command for local failures, this time there was an assurance from the highest level that there would be no such incidence. Therefore, at all levels, the Forces went into battle with full confidence in the leadership and in their own professional ability, to rise to greater height and glory during the battles. During 1965, whilst junior leadership, mainly consisting of regular officers and ECOs, was pronounced, there was some criticism regarding the role of the Junior Commissioned Officers (JCOs). During this conflict, the Junior Commissioned Officers have also proved their worth as leaders and if the list of decorations and honours of the war is any guide, then there is no doubt that this category of junior leadership in the Army has come to stay. These junior leaders, therefore, should be given their due respect for their role and be treated with dignity which is due to them. They must feel assured that they too have a constructive role to play in the army's hierarchy.

Having analysed some of the important lessons for which kudos rightly should be given to all concerned and which have greatly contributed to our success, there are other aspects which need to be examined more realistically, pragmatically and critically if our Armed Forces are to fulfil their allotted role and destiny in future.

The Armed Forces are trained for war in peace-time. This implies that the force structure must be built up, maintained, equipped and fully trained to meet any contingency across our borders. Unfortunately in peace-time, the Defence Services are hamstrung by three-tier control viz.

ministerial, secretarial and financial. It is the latter particularly which tends to put a stranglehold on the rapid progress and build-up of the Defence Services in peace-time for preparing them for their combat role. It is too late when an emergency is upon us to sanction all proposals on file. New units and formations cannot be raised overnight; equipped and trained in a short time to make them fully fit for combat. There is, therefore, a necessity to review this type of control and to streamline it to make it more responsive to the Defence Service requirements as projected by the professional heads of the Services. The latter's judgement in all military matters must be justifiably respected and implemented.

The organizational pattern of some of our combat formations and units needs another detailed and deep scrutiny. For example, the quantum of forces allotted to the Rajasthan sector was considered inadequate. Had there been a balanced force in this sector comprising mechanised divisions (which we do not possess today) with armour as the predominant arm, infantry mounted in armed personnel carriers (full-tracked or half-tracked) self-propelled artillery and with close air support, such formations would have exploited fully the desert terrain by swift advances and wide flanking movements. We would have achieved far more tangible results in this sector had we possessed this type of formations. Due thought should be given by the Services Headquarters to raise such formations in future.

AVIATION CORPS

Similarly, the heli-borne operations carried out in the vicinity of Dacca just before its capture are a pointer in the right direction for a new strategical and tactical concept. This is to emphasise the need for creation of an Army Aviation Corps. There is no doubt that the concept of vertical envelopment by the use of fixed wing or helicopter-borne forces enhances the strategic and tactical mobility of the Army. Besides achieving strategical and tactical surprise, it places the Army on the threshold of a new approach to the conduct of the land battle which will result in greater mobility and exploit the principles of war, particularly that of surprise and concentration of effort to an unprecedented degree. It is, therefore, vital for the Army to establish an Army Aviation Corps notwithstanding the present professional differences between the IAF and the Army. This is more important when viewed in the context of strategy in the West where land battles in the traditional military concept of the past are unlikely to achieve decisive results in future due to the preponderance of defensive measures taken by both sides. The creation of an Army

Aviation Corps will open up new strategical vistas which we should fully exploit.

Another weak link in our organizational set-up in the Army is the paucity of air defence resources. This is mainly due to the fact that indigenous production of the L-70 air defence gun system with its computerised super-fladermous radar and generator has lagged far behind the requirements of the Forces. The production of this gun system needs to be accelerated considerably to meet the multifarious requirements of protecting vulnerable points and vulnerable areas besides giving air defence protection to the field forces. There is also a vital necessity to design and develop a low level surface-to-air missile of the British" Rapier" type—a highly mobile computerised air defence system—for use in the field to fill in the gap between the high level surface-to-air missiles and the L-70 gun system. Coupled with the air defence measures in the field, the Civil Defence Organization in this country, to say the least, is inadequate. Government would do well to look into this aspect de novo and to reorganise the Civil Defence set-up on modern systematic and efficient lines for any future eventualities.

OFFICERS' SHORTAGE

The Services have never been able to fill up their quota of officer rank in peace-time. There has been a perennial shortage of officers, particularly at the middle and junior level leadership. During the recent conflict, to make up the officers' shortage, various steps were taken such as commissioning cadets from IMA before completion of their course and sending them straight from this training institution to the battlefield. This is cannon fodder. Other steps taken were to recall some categories of Reservists and to induce ex-ECOs to obtain Short-Service Commission. At best, this is a stop-gap measure confined mainly to static units. At the same time, it was unfortunate that schools of instructions conducting various training courses were closed down and the instructional staff who are highly trained and qualified were given non-effective assignments such as to supervise Press and film censorship and other trivial jobs when their professional services could have been well utilised at the front. This is a sheer waste of trained and experienced officer cadre. It will be better for the Services, since there has been persistent shortage of officers to look into this aspect critically to create more facilities and expand the capacities of the National Defence Academy, the Indian Military Academy and other training institutions so that the

necessary quota is filled up in the shortest possible time. The Armed Forces of India are professionals and they cannot function without their full complement of officers cadre during a war effectively and efficiently.

There are some critics and chair-born strategists who advocate that an era of short wars in underdeveloped countries has come to stay and therefore all our planning, preparations and financial expenditure should be tailored towards this concept. This is a dangerous theory and should be well avoided. If the Armed Forces are required to fight without looking over their shoulders, then they must have adequate resources in reserves both in manpower and in warlike stores. The War Wastage Reserves (WWR), which is required at the commencement of hostilities, must be readily available and stockpiled at the beginning of hostilities. Thereafter it must be replenished with fresh production from the defence factories and other sources to maintain a steady and uninterrupted flow to the forward troops. Therefore, the present policy of holding six months, WWR should under no circumstances be curtailed. It has been amply proved that had we not catered to maintain the WWR at the existing level to back us up during the 14-day war of great intensity and speed, we would never have been able to achieve decisive military results. It will be appreciated that wars and battles are not fought at an intensive rate all the time, there are also semi-intensive and quiet periods. In terms of militare concept, the expenditure of ammunition and other war-like stores will always be there to greater or lesser degree depending on the situation. The question, therefore, of holding adequate reserves must be considered in its correct perspective. While it is necessary that the production of warlike stores like armaments, munitions, armed fighting vehicles, aircraft, naval ships and so on are designed and manufactured under governmental control, yet there are thousands of items of general-purpose stores and even sub-assemblies and components of warlike stores which could conveniently and effectively be undertaken by the civil industry to augment the capacity of the ordnance factories. Not only will this ensure and increase a speedy output in peace-time for the rapid build-up of the Armed Forces according to the planned structure and within the time-framed in which they are to be made available, but it will further provide necessary continuity of sustained indigenous production to back the war effort, which is vital. It would, therefore, be desirable to make the optimum use of our national resources. The integration of defence and civilian industrial potential in the country must be viewed and undertaken in this context.

THE LEW CONTRACTOR OF THE PARTY OF THE PARTY

During the short period of war, we suffered heavy casualities—approximately 11,000 killed, wounded and missing. This is understandable in a short, hard, swift and relentless campaign of the type which we have concluded. The country appreciates and honours the sacrifices made by our Jawans. Now that the Government has given positive assurances to widows and families of bereaved or wounded and incapacitated soldiers that they will look after them, these promises must be translated into reality. Such promises have also been made in the past but to date these have remained unfulfilled. It will be a breach of faith on the part of the nation and by our leaders if we do not take a serious note of the sacrifices the Jawans have made for the honour and glory of the country. It shall be a sacred trust and responsibility of the Government to ensure that the promises now made are fulfilled to the last letter.

PUBLIC RELATIONS

The public relations aspect during the war was handled much more effectively than in the past. In spite of this, a great deal of room for improvement is still necessary. At the beginning of the hostilities, expert commentaries were given over the radio by two senior retired Army Commanders and a Corps Commander but their commentaries were inexplicably discontinued to be replaced by a junior non-serving officer from a government-sponsored institute. Perhaps the views of the senior officers were too forthright and accurate to cause discomfiture. Another tendency which was overdone in public relations was that from the Service Chiefs down to the junior level officers, all were allowed to air their views in public on tactical battles, their outcome and other military issues. This is an erroneous approach as far as the Armed Forces are concerned and in the excitement of victory, we have been carried away in this direction more by default than intent. It is the duty of an official spokesman nominated at specified levels to brief the press and other communication media and this responsibility should not be delegated below the Chief of Staff level at Command or Corps Headquarters.

Situated as we are now geographically and historically with a newly-born free and friendly neighbour but still with a hostile West Pakistan, our strategical and tactical concepts must be reoriented accordingly. We must, therefore, evolve new concepts and tailor our force structure accordingly. The creation of Army Aviation Crops towards the concept of vertical envelopment, the raising and equipping of mechanised divisions for desert warfare, expansion of the Navy and augmenting its effectiveness further

with support from shore-based aircraft, the improvement of our air defence potential, equipping the IAF with more modern and sophisticated aircraft are measures which must receive due consideration early.

Now that the excitement and joy of our achievements and victory are gradually subsiding, we have tasks ahead of us and which we must face with the same courage and fortitude as we did during the war. All throughout the months preceding the war, during the war itself and thereafter, the nation, under the inspiring leadership of Mrs. Indira Gandhi, has shown great maturity and single-minded purpose. The nation acted as one single entity with one voice. There is no reason to doubt that it will not act in similar manner in any future crises whether external or internal. Whilst credit is due to the government and the Armed Forces, the part played by every citizen of India in forging national unity during the critical months and for supporting the government and the Defence Services wholeheartedly in every sphere of their activity is commendable and should not be forgotten. We are proud of our victories and our national honour which we have fully redeemed. It would, therefore, be pertinent for us as a matured nation to make use of the lessons learnt from the recent conflict and ones which will further follow as a result of the detailed analysis when the despatches from the Field Commanders are received and to put them to constructive use for enhancing the Armed Forces efficiency and their glory further.

Finally the wag who recently made a public statement "soldiers hate wars—they love parties" would do well to recall the famous motto of Lord Chetwood* inscribed at the portals of the Indian Military Academy. The profession of arms is for men of guts and action; not for those who believe in wine, women and song.

*"The safety—honour and welfare of your Country come first—Always and Every time The honour—welfare and comfort of the Men you command—come next Your own ease—comfort and safety come Last—Always and Every time."

Lord Chetwood

^{*}Motto inscribed at the Indian Military Academy.

INDO - SOVIET RELATIONS UNDER KOSYGIN

M. S. Dahiya*

VER since Mr. Khrushchev's visit to India in 1955, the Soviet Union has been supporting this country both militarily and cconomically. She supported India on Kashmir with her Security Council vetoes in 1957 and 1962; her economic assistance increased annually. India and the Soviet Union took a common stand on all anti-colonialist and anti-imperialist issues. The 1962 Chinese invasion, the Moscow-Peking rift and the American arms supply to Pakistan served to build up India's "cosy image" of a special relationship. But after the eclipse of Khrushchev in 1964 Russian policy in relation to India took a new turn. When war broke out between India and Pakistan in May 1965 in the Rann of Kutch, the Soviet Union adopted a neutral attitude and advised both India and Pakistan to solve the dispute by peaceful means. Earlier when President Ayub Khan of Pakistan visited the Soviet Union in April 1965, Moscow issued a joint communique containing a formula on national liberation movements ambiguous enough to be applicable to Kashmir and, indeed, was so interpreted by Karachi media. The communique stated that both sides declared "resolute support of the peoples waging a struggle for national liberation and independence and of peoples fighting for the right to decide their future at their own discretion".2 Commenting on this move, Dawn (Karachi) observed that it had broken "the barrier which Indian diplomacy had succeeded in erecting between Pakistan and the Soviet Union over the past decade".3 Viewed against the background of the Russian stand4 on the Kashmir issue, it was a jolt for the Indian policy in relation to Moscow.

^{*}The author belongs to the Department of Political Science, Kurukshetra University, Kurukshetra (India).

^{1.} See Pakistan Horizon, Vol. XIX, First Quarter, No. 1, 1966, p. 6.

^{2.} Sheldon W. Simon, "The Kashmir Dispute in Sino-Soviet Perspective", Asian Survey, Vol. VI, No. 3, March 1967, p. 178.

^{3.} M. A. Choudhary, "Pakistan's Relations with the Soviet Union", Asian Survey, Vol. VI, No. 9, Se tember 1966, p. 497.

^{4.} On December 10, 1955, during his visit to India, Khruschev had stated in unqualified language that the Kashmir question, which was created by some interested colonial powers, had been dealt with finally by the people of Kashmir when they had decided to join the Indian Union and that the Soviet Government accepted their decision. N. A. Bulganin and N. S. Khrushchev speeches during sojourn in India, Burma and Afghanistan (Representative of Tass in India, New Delhi, 1956), pp. 83-86. Cited in J. A. Naik, "Soviet Policy on Kashmir", Foreign Affairs Report, Vol. XVI, No. 12, December 1967, p. 7.

NEUTRAL STANCE

When the Indo-Pakistan armed conflict of September 1965 started. the Soviet Union took another step to demonstrate her neutrality. Pravda warned China and advised both India and Pakistan to stop fighting.⁵ Like Washington, Moscow realized that this would weaken both India and Pakistan and would encourage Peking to exploit the situation. When China started making threatening noises and gave an ultimatum to India. the Indo-Pak war assumed a new dimension. It was felt in Moscow that Chinese intervention would bring Washington into the conflict on the Indian side that would be detrimental to the Soviet interests in South Asia. To avoid this eventuality, Mr. Kosygin made four separate appeals to India and Pakistan for a peaceful settlement of the dispute and offered Soviet good offices. Consequently, Mr. Lal Bahadur Shastri and President Avub Khane agreed to meet in Tashkent. It was the first time when a Communist country played the role of a mediator in a conflict between non-Communist countries. The major consequence of this meeting was that both India and Pakistan agreed to withdraw their forces to their positions of August 5, 1965. Though our aim is not to evaluate the importance of the Tashkent Declaration, it is pertinent to note that it was a great achievement of Soviet diplomacy. According to a Pakistani observer, "President Ayub Khan commended the Soviet leaders for observing strict neutrality throughout the negotiations and the Pakistani Press was unanimous in its praise of Premier Kosygin's statesmanship".7

By the end of the Tashkent Declaration it had become clear that the Soviet Union was no longer an unqualified supporter of the Indian cause and she was inclined to observe strict neutrality in order to improve her relations with Rawalpindi.⁸ Though the ultimate aim of Russia was not to sacrifice Indian interests, it remains a fact that her move at Tashkent

^{5.} Pravda, September 14, 1965.

^{6.} Since Pakistan was heavily dependent on U. S. economic and military assistance, and since the United States had supported the Soviet initiative, President Ayub Khan had absolutely no room for any manoeuvre, and was obliged to accept Soviet good offices to arrange a meeting with the Indian Prime Minister to iron out their differences on the negotiating table. M.S. Rajan, "The Tashkent Declaration: Retrospect and Prospect", International Studies, Vol. 8, July-1966-April 1967, p. 6.

Zubeida Hasan, "Pakistan's Relations with the U.S.S.R. in the 1960s" The World Today, Vol. 25, No. 1, January 1969, p. 31.

^{8.} Moscow's entire strategy in Asia had collapsed as a result of rupture with China and Moscow's presence in Asia had been practically eliminated. Moscow began picking the pieces and her policy towards the sub-continent underwent a subtle change. Not that friendship with India was not needed or valued but it was hoped that simultaneous relations with Pakistan would facilitate the new role of the Soviet Union. Moscow hoped to help both Islamabad and New Delhi and with it to provide a new balance in Asia. V. P. Dutt, "Indo-Soviet Relations: Common Interests", National Hetald (New Delhi), December 31, 1969.

resulted in the withdrawal of Indian forces from strategic points. Moreover, the unqualified support to India on the Kashmir issue also evaporated in the sense that Moscow began to recognise it as a disputed territory. As a matter of fact, what the Soviet leaders did not say with regard to the Kashmir dispute is as significant, if not more, as what they said. They did not say that Moscow accepted the basis of Kashmir's accession to India; viz, the instrument of accession signed by the Maharaja of Jammu and Kashmir on October 26, 1947. The emphasis on 'the people of Kashmir' was also not without significance. It was implied that in case of doubt the will of the people could be ascertained again.9

The question may, however, be asked: why did Moscow abandon the pro-India stance in the Indo-Pak conflict? By the time Mr. Kosygin appeared on the Russian scene the leaders in the Kremlin became aware of the weakness of their South Asian policy exclusively centred round New Delhi. Moreover, the Cuban crisis and the growing influence of America and China in Pakistan compelled the Soviet Union to change her policy towards the sub-continent. When in 1955, Russian leaders declared their support to India on the Kashmir issue, the cold war was at its climax. By that time Pakistan had entered into a military alliance with the United States, which was particulary designed against the Soviet bloc by any definition. Under such circumstances, it was natural on the part of Soviet Union to support non-aligned India against an aligned Pakistan. But in 1965, the circumstances were quite different. India's humiliating defeat in 1962, China's growing strength and her intention to exploit the situation during the Indo-Pak conflict in 1965 adumbrated the importance of an accommodation between New Delhi and Rawalpindi. To achieve this end the Soviet Union had to abandon her pro-India stance.

PAK STRATEGY

On her part, Pakistan had been assiduous in her effort to live down the U-2 incident and to assure the Kremlin that her membership of American-sponsored military alliances was in no way a reflection of Pakistan's hostility to Moscow but was directed purely—so far as Karachi was concerned—against India. It was a measure of success of Pakistani strategy that their frank acknowledgment that the entire thrust of their foreign policy was against India and that, therefore, their courtship of one Big Power was not inimical to the interest of the rival Big Power had

See Vijay Sen Budhraj, "The Evolution of Russia's Pakistan Policy" The Australian Journal of History and Politics, Vol. XVI, No. 3, December, 1970, p. 358.

carried conviction in Moscow.¹⁰ Besides, in 1965, Pakistan refused to support the U.S. policy in Vietnam.¹¹ All this gave the impression in the Soviet Union that Rawalpindi was no longer a puppet in the hand of Western powers. It had become clear even in 1963, when Pakistan entered into an agreement with China pertaining to the Pakistan-occupied territory in Kashmir which was resented by Washington.¹² Besides, with the passage of time Pakistan ceased to take interest in the military pacts and recalled her representative from the SEATO Military Advisers Group.¹⁸

Above all, whereas an apparently pro-India stance in 1955 was the result of the American alliance with Pakistan, the policy of treating India and Pakistan on equal footing in 1965 became essential in view of the major threat of China on the southern border. "Pakistan's control over Gilgit in occupied Kashmir—'a key point of Sino-Soviet strategic manoeuvring'—Rawalpindi's obsession with increasing its military power at any cost in order to even the balance with India, New Delhi's attachment with the policy of non-alignment and its performance in 1962 and 1965 armed conflicts—all tended to give Pakistan a better bargaining position than India". 15

KREMLIN VIEW

Under such circumstances, by 1967 the relations between Moscow and New Delhi began to fluctuate between tolerable and normal. Since the leaders in the Kremlin were determined to improve their relations with Islamabad, and since it was felt in Moscow that what India did not give to the Western powers in the 50s was not likely to be extended to the Soviet Union in

^{10.} V.P. Dutt "India, Pakistan and the Soviet Union", National Herald, April 24, 1966. When Ayub Khan for the first time met Kosygin in 1965 in a village 25 miles far from Moscow, he left an indelible impression on the Soviet leaders by saying that their entire strategy was designed against India. See Ayub Khan, Friends Not Masters: A Political Autobiography (Karachi, Cambridge University Press, 1967), p. 170.

^{11.} Earlier in 1964, in his interview with the B.B.C. in London, Ayub made it clear that should there be any serious confrontation between China and the U.S. over North Vietnam, Pakistan, in spite of her SEATO obligations, would not get involved. George J. Lerski, "The Pakistan-American Alliance: A Revaluation of the Past Decade", Asian Survey, vol. VIII, No. 5, May 1968, p. 411.

^{12.} The then Foreign Minister of Pakistan, Mr. Z.A. Bhutto, went to the extent of declaring in the National Assembly that "an attack by India on Pakistan involves the territorial integrity and security of the largest Asian country......" It was interpreted by political observers as a reference to Chinese support against India. See Pakistan Horizon, Vol. XVI, No. 3, Third Quarter, 1963, p. 262.

^{13.} B. Pyadyshev, "New Developments in Pakistan", International Affairs (Moscow), June 1968, p. 78.

^{14.} According to *The Observer* (London), the object of the Russian foreign policy for the last hundred years has been the security of her Southern flank. The leaders in the Kremlin rarely confuse ideology and other considerations with diplomacy.

^{15.} Vijay Sen Budhraj, op. cit., p. 358

the 60s, they did not pay any heed to Indian interests. Pakistan also played quite an important role in the furtherance of such development. When in September 1967 President Ayub Khan again visited the Soviet Union, he was closer to the Russian line of thought than to that of American on the Vietnam issue. He said that there was need for immediate cessation of the war in Vietnam in acknowledgment of the right of the Vietnamese people to decide their fate for themselves without outside interference as envisaged in the Geneva Agreement of 1954. He also expressed similar views on the Arab-Israel conflict. Moreover, Islamabad had built a good image in the Soviet Union. According to a Russian observer:

More and more people in Pakistan are coming to realize that participation in the aggressive SEATO and CENTO blocs has done Pakistan no good and that these blocs are tools of U.S. aggressive policy the aim of which is to divert Pakistan from its way of independent development and to embroil it in military gambles.¹⁶

On the other side, Indian politics had annoyed the Russian minds to a large extent. The refusal of Congress ticket to Mr. V.K. Krishna Menon¹⁷ to fight the Lok Sabha election from the North-Eastern Bombay constituency and the hold of "Rightists" on the Indian National Congress left a bad impression in Moscow. It was believed in the Soviet Union that the "Leftist forces" had no say in the Indian political system. While commenting on the nomination of Congress candidates in 1967, a Russian writer observed:

A large group of businessmen, rich merchants and big landlords joined the INC a few months before the elections, their purpose being to use its prestige to get into the organs of power. At the same time consistent INC democrats and patriots were attacked simply for expressing dissatisfaction and alarm over activities of the Right. Among those who were attacked was K. Menon who was refused by the party leadership the right to run in the North-Eastern electoral district of Bombay where he was twice (in 1957 and 1962) elected deputy to the lower Chamber of Parliament. Instead of him in this electoral district, the INC ran H. Mahindra, a joint owner of the trade and industrial concern of the same name, who maintains close ties with Tata and other monopoly groups. 18

S. Alexadrov, "Pakistan: Twenty Years of Independence", International Affairs (Moscow) September 1967, p. 87.

^{17.} The main reason of dissatisfaction over the refusal of Congress ticket to Mr. Menon was that he always expressed pro-Russian views and criticized the United States. In 1962, in the Security Council, he went to the extent of defending nuclear explosion by the Soviet Union, which was criticized by the then Prime Minister, Pt. Jawaharlal Nehru, during his visit to the United States in November 1961.

N. Savelyev, "Monopoly Drive in India", International Affairs (Moscow) April 1967, p. 39.

Another scholar commented:

....the big Indian monopolist Birla had promised his support to one hundred "suitable" candidates chiefly from the INC....The growing activity of the reactionary elements, the tenseness of the election campaign and the Rightists' efforts to seize leadership of the INC make unity of the country's progressive and democratic forces imperative.¹⁹

Viewed against the background of political stability, the result of the General Elections in 1967 was an appalling thing. Coalition governments came into existence in various states. Since the coalition partners could not pull on with each other, a chain of instability started which culminated in the fall of various governments in the autumn of 1967 and beginning of 1968. Whereas India was passing through a critical phase of political instability, there was a peaceful atmosphere in Pakistan under the virtual dictatorship of Ayub Khan. Under such circumstances, the Soviet Union took another step of wooing Pakistan. When Mr. Kosygin visited Pakistan in April 1968, he agreed to sell arms to Rawalpindi. Here it is important to note that the major cause of Soviet opposition to the military pacts of Pakistan was eliminated on the eve of Kosygin's visit to Pakistan when Rawalpindi gave notice to Washington for the termination of the lease of the American Communication Unit at Budaber near Peshawar, thus depriving the United States of the few remaining strategic benefits she derived from her military alliance with Pakistan.²⁰ According to the Daily Telegraph, the removal of the last American air base in Pakistan, from which U-2 flights and other reconnaisance of Russia were launched, was regarded as part of the bargain under which Pakistan had acquired Russian weapons.²¹ While commenting on Moscow's decision, Professor V.P. Dutt. observed:

Partly responding to Pakistani overtures, partly hoping to reduce the impact of Chinese presence in Pakistan and partly to compete with Washington, the Soviets gradually moved towards a more active role in the Indo-Pak sub-continent and a greater presence in Islamabad. Once this decision had been taken, the supply of arms to Pakistan on some scale or another was inevitable. It would have been impossible for the Soviet Union to carry Pakistan along with her in the promotion of this policy if she did not seem to look after the defence needs of that country.²²

^{19.} N. Andreyev, "India's State Structure and Political Affairs", International Affairs (Moscow), February 1967, p. 113.

^{20.} Zubeida, Hasan, op. cit. p. 29.

^{21.} The Daily Telegraph (London) April 15, 1969.

V.P. Dutt., "Indo-Soviet Relations: Common Interests", National Herald, New Delhi, December 31, 1969.

The surprising thing is that the Soviet Union adopted a policy which was denounced by her in 1964. In February 1964, Soviet party theoretician, Michail Suslov, reporting to the Central Committee of the Soviet Communist Party on relations with China, taunted the Chinese on their choice of friends. "China was sparing no effort to befriend Pakistan, which was a part of the Western network of military alliances, but was reserving her enmity and hostility for India, which was non-aligned and independent", Suslov pointed out.²³ The Russian leaders defended their stand and said that their proposed arms deal with Pakistan would act as a check against Pakistan going wholly into the orbit of Chinese influence. According to an Indian daily, "The Moscow view seems to be that the Chinese influence over Pakistan developed after the stoppage of arms aid by the U.S."

INDIA'S RESENTMENT

The decision of the Soviet Union was met with resentment in New Delhi. Mrs. Indira Gandhi, the Prime Minister, described it as a "fraught with danger". 25 All the non-Communist members in Opposition in the Indian Parliament organised a demonstration before the Russian Embassy in New Delhi. In the Parliament, the Swatantra leader, Piloo Modi, moved a censure motion against the government and demanded its resignation for the failure of foreign policy in relation to the Soviet Union. In a sarcastic way he said that when in 1954 the United States started arming Pakistan, "all of us including Jawaharlal Nehru, categorically condemned the supply of arms as an unfriendly act towards India. Today we see Nehru's daughter come and whimper, and say, we are not happy about it."26 With the sole aim of pacifying the Indian reaction, the Soviet Prime Minister in a message to Mrs. Gandhi communicated that the Soviet Union would do nothing which might undermine the strong bonds of friendship and confidence between the two countries.27 The Minister for Light Industries of the Soviet Union assured the Indian Government that Pakistan would not be allowed to use Soviet arms against India.²⁸

V.P. Dutt. "India, Pakistan and the Soviet Union", National Herald, New Delhi, April 24, 1968.

^{24.} The Hindustan Times, New Delhi, July 9, 1968.

^{25.} International Herald Tribune (Paris) and The Daily Telegraph (London), July, 10, 1968. According to The Daily Telegraph, "As long as seven months ago, Mr. Kosygin informed Mrs. Gandhi of Russia's need to wean Pakistan away from Peking and that this would require a substantial gesture such as arms deliveries. The Prime Minister should have not been surprised to hear that this was actually about to happen. The public shock stemmed not so much from Moscowite treachery but from Mrs Gandhi's failure to take the country into her confidence." Ibid., August 9, 1968.

^{26.} Lok Sabha Debates, Vol. XVIII, No. 1, July 22, 1968, col. 367.

^{27.} The Patriot (New Delhi), July 12, 1968, See also The Times (London), July 12, 1968.

^{28.} The Tribune, Ambala Cantt., November 10, 1968.

The resentment in India reached its peak when a substantial number of members of Parliament demanded the cancellation of President Zaqir Hussain's visit to the Soviet Union. Some demanded a stronger orientation towards Washington. The pro-American lobbies in the Indian Parliament began to dominate the scene. At that time a cartoon appeared in *The Hindu* (Madras) showing Kosygin and Ayub Khan rolling out a red carpet for a team of American diplomats led by Nicholas B. Katzenbach, Under Secretary of State, which was about to visit India. The point of the drawing was that New Delhi's resentment over the Soviet decision to sell arms to Rawalpindi was bound to ensure the Americans an eager and warm reception in India that they probably could not have counted on otherwise.

TURNING POINT

Up to the end of 1968, relations between Moscow and New Delhi continued to deteriorate, and by this time the Russian failure to wean Pakistan away from China²⁹ had come to the surface. The year 1969 marked a turning point in Russia's South Asian policy in the sense that she began to blame Peking for the clash with India. The accusation was made in an article in the Soviet Journal, Komsomalshaya Pravda. Observers in New Delhi noted that this was the first time since China's attack on India in 1962 that a Soviet writer had directly accused Peking of having engineered the border conflict with India. Up to this time the expression used in Soviet publications to describe Chinese aggression on India was "the China-India border Conflict" and, at times, "extension of the Sino-Indian Conflict by China."30 The Indian Government responded favourably by declaring India's support to Russia on the Sino-Soviet conflict.³¹ With the passage of time relations between the two began to improve and were cemented when Kosygin visited India in 1969 and declared Soviet economic assistance to India in every field. By this time the political upheaval had taken a new shape in Pakistan. The growing resentment

^{29.} In December 1968, Peking gave a third interest-free loan to Pakistan. Again on Pakistan's National Day (March 23, 1969) the Chinese Vice-Premier assured Islamabad that the Chinese people would always remain their reliable friends in their struggle to oppose foreign aggression and interference and safeguard national independence. The Chinese people remained unshakable in adhering to their stand of giving resolute support to the Kashmir people's struggle for the right of self-determination. "Premier Chou attends Pakistan National Day Reception", Peking Review March 28, 1969, Vol. XII, No. 13, p. 27. Cited in V.S. Budhraj, "From Tashkent to the Treaty of Peace, Friendship and Cooperation: The New Trends in Russia's South Asian Policy", The Indian Journal of Political Science, Vol. XXXII, No. 4, October-December 1971, p. 495.

^{30.} The Times of India, New Delhi, March 21, 1969.

See the statement of Mr. Dinesh Singh, the then Minister for External Affairs, The Times of India, New Delhi, 9 April 1969.

among the masses against the dictatorial rule of President Ayub Khan had spoiled the image of Pakistan in the Soviet Union. On the other side, the political development in India had left a good impression on the Russian minds. The growth of leftist forces, the nationalization of 14 major banks, the elimination of Mr. Morarji Desai from the Union Cabinet and the victory of Mr. V.V. Giri in the Presidential election were welcomed in Moscow.³² The two countries came closer when the Soviet Union's initiative in suggesting measures for strengthening international security was widely greeted and supported in India. Of particular interest was the idea of creating a system of Collective Security in Asia, as outlined in the speech by the General Secretary of the C.P.S.U., Mr. Brezhnev, at the international meeting of Communist and Workers' Parties in Moscow. The Minister for External Affairs, Mr. Dinesh Singh, praised and welcomed the Soviet proposal,³³ which in August 1971 culminated in the conclusion of a "Treaty of Peace, Friendship and co-operation".

When Mr. Swaran Singh, the Indian Foreign Minister, visited the Soviet Union in June 1971, Mr. Kosygin supported the Indian stand with regard to the problem of Bangla Desh and called for conditions to be created to enable millions of East Bengal refugees who had flooded India, to return to their homeland.34 Since it was a clear-cut pro-India move, the generals sitting in Islamabad turned it down outright. In July 1971, the Soviet leaders had been particularly irritated by President Yahya Khan's disregard of their appeals to modify his repressive policy in East Bengal and to come to terms with Sheikh Mujibur Rehman. Besides, the role played by Yahya Khan in arranging Dr. Henry Kissinger's visit to Peking also jolted the Soviet leaders severly. At that time it had become clear to the leaders in the Kremlin that Rawalpindi was inclined to safeguard the interests of China and America at the cost of the Soviet Union. This led the Soviet leaders to adopt a pro-India attitude in the Indian sub-contintent. The relations between the two were cemented by the conclusion of the "Treaty of Peace, Friendship and Co-operation" on August 9, 1971. On August 16, 1971 Moscow warned India's unfriendly neighbours—Pakistan and China—that "they would in future have to reckon with the Indo-Soviet peace treaty with all its limitations". This warning was explicit in the speech of the Foreign Minister, Mr. Andrei Gromyko, at the meeting of the Supreme Soviet Presidium, which ratified the treaty.35 This treaty proved quite

See O. Mayev, "Blow at the Monopolies", International Affairs, (Moscow), October 1969, p. 98. See also M. Stasov, "Nationalization of Big Commercial Banks in India", International Affairs, November 1969, pp. 125-6.

^{33.} V. Pavloshky, "Soviet-Indian Co-operation", International Affairs (Moscow) January 1970, p. 49.

^{34.} National Herald, New Delhi and The Tribune, Chandigarh, June 10, 1971.

^{35.} The Times of India, New Delhi, August 17, 1971.

beneficial for both Moscow and New Delhi. It checked both Peking and Washington from joining the war on the side of Pakistan. In the absence of such eventuality it became easy for India to give a humiliating defeat to the military junta of Pakistan. Moscow again started to play a dominant role in South Asia after a considerable length of time.

NATIONAL INTERESTS

In the concluding lines, it may be said that India's dynamic non-alignment in favour of Moscow and Russia's inclination towards India are based on their own national interests. There is nothing common between the two which may be said to have influenced their relations to a large extent. Whereas Russia's interest lies in the safety of her southern flank, India's objective is to build herself against her two enemies—Pakistan and China. Therefore, they came closer to each other to achieve these aims. Russia's friendship with India is significant in the sense that she has an ally in South Asia to play a considerable role. The importance of Russian support to India lies in the fact that China and Pakistan will not be able to exploit the situation in the subcontinent.

It is also pertinent to note that American policy under President Nixon played an important role in pushing India into the orbit of the Soviet Union. Had the US Secretary of States, Mr William P. Rogers, not declared that the U.S.A. would not help India in case she was attacked by China, perhaps the Indo-Soviet treaty would not have been concluded. So, it seems sound to observe that the attitude of the U.S.A. towards the subcontinent, the interests of the Soviet Union and India and the Pakistan U.S.-China detente equally played a major role in the maintenance of friendly relations between Moscow and New Delhi.

APPROACH TO TACTICS

MAJOR GENERAL O S KALKAT, PVSM

UCH time and effort is devoted to the study of the principles of war. Such theoretical study does not, however, help officers in battle. It is much better to devote available time and effort in peace-time to evolving a sound approach to tactical problems. Based on my experience in the Army I find that generally officers are vague and confused in their approach to tactical problems.

The aim of this paper is to bring out the basic principles of the conduct of operations at battalion level. It is important that we know the basis of the conduct of operations at battalion level. Warfare is a very simple art. It is simple provided you have the capacity to think logically and analyse problems. As I see, there are things a soldier has to tackle in war. First is the enemy, next is ground, third is his own manpower or men with him and the fourth is weapons.

If one knows how to analyse these four factors correctly and get value out of that analysis, one will be a successful leader. And no amount of mugging up of books and pamphlets will give one that ability. A successful commander is one who can assess the enemy. The most essential thing in battle is the correct appreciation of the enemy's pattern. It does not matter what level of command, whether one is commanding a section, a platoon, a company or a battalion; one must be quite clear as to what the enemy can do, what is his likely pattern of battle. This is the start of any tactical analysis or appreciation or call it what you like. Now once the mind is clear about the enemy then one can start appreciating the piece of ground. The first imponderable is the enemy, the second imponderable is the ground. It is the correct detailed analysis of the ground which will give one results and I find officers weak in analysis of the ground due to the following reasons:

- (a) they have not got an eye for the ground;
- (b) even if they have an eye for the ground they do not know what to look for and what they are looking at.

THE BEST TEACHER

Unless one develops the ability to evaulate ground, nothing worthwhile will be produced. I am strongly reminded of my own soldiering. When I started, I was lucky and went straight into battle. I commanded a company and I learnt a lot of soldiering, the hard way because the bullet was there. Bullets allied with the ground is the best teacher. No amount of sand model discussions. Test and exercises will give one the correct analysis of the ground and use of the ground unless the bullet is there. Immediately after I was drafted to the North-Western Frontier fighting the Pathans, and I served there right up to 1947 I was in the North-Western Frontier fighting the tribals, from Bannu to Razmak. I used to go out every day as a company commander and command my company fighting the tribals. The North-Western Frontier was the best training ground. Why was it good? Leadership was good, men did work and function effectively because we had the bullet. It was a boon to the Army and we learnt our basic soldiering and tactics on that ground because the fear of that stray bullet—one in a thousand, one in two thousand—and the casualties which that bullet caused. One did fire and use the ground because no one wants to die and it was only because of the North-Western Frontier that I cemented my tactical knowledge of the use of ground.

It is proposed to discuss all the main operations of war starting from defence, then go on to the attack, the advance and the withdrawal. If you are in defence, how to set about it. It is a way of thinking. One has been taught appreciation, and the tendency is to get foxed considering long-winded factors and deductions. The aim is to evolve sound solutions to tactical problems. I have a series of questions based on all the operations—defence, attack, withdrawal, advance—and a series of basic principles. If it is defence, I say, those are the five questions and I want answers to those questions. A logical consideration of these will give a workable plan.

AIM IN DEFENCE

Now what is your aim in defence? When you are defending a piece of ground what is your aim? Simple, the aim is to keep the enemy at arm's length. To keep him at bay. You are not allowing him to get near you because the nearer he gets to you, the more unpleasant it is, till finally he gets on top of you and then it becomes very unpleasant. Now what is the aim in attack? It is to get on top of the enemy. You see,

somehow or the other you have got to get on to that objective. So you can see that in the two basic operations in tactics, defence and attack, the aims are contradictory. One is to prevent the enemy getting on top of you. The other is to get on top of the enemy. These are simple straightforward facts and, therefore, you cannot mount a successful attack unless you analyse defence thoroughly, unless you know how defence is organised. No army can ever achieve victory or any success unless it can attack and attack successfully. Therefore, defence is known as the basic operation of war.

DEFENSIVE LAYOUT

Now for defence, I have a number of questions. Whether, it is a platoon, or a company or a battalion or a brigade, the first question you ask is, what are the likely approaches of infantry and tank to my area of operational responsibility?

Why are you sitting in defence? You are guarding a piece of ground and preventing the enemy from getting to that piece of ground. How can you do it? Not by sitting on a knoll or a feature 10 feet higher than the rest and call it ground of tactical importance. If it is only infantry country it will only be infantry approaches as in the mountains, if it is tank country, it will be both infantry and tank approaches to the area of operational responsibility. If you are a platoon commander you will have a small area, if you are a company commander, it is bigger, if you are a battalion commander, it is bigger still. Remember that, and while we are on this question of approaches, an approach is directly related to the quantum and the size of the force using that approach. It is directly related to the level of command. What is the approach at platoon level is not the approach at company and battalion level. An approach at platoon level is just a track. As you go up the level of command at a company, it is where you can deploy, at least in plain country, two platoons in assault formation. It is an avenue. An approach is an avenue along which or astride which a force will move on to the objective. An approach must be described to finality and finishes on the last objective. It is best to go out to that piece of ground which has been given to you, go to a point of vantage outside your area of operational responsibility in the direction of the enemy. Remember, you must assess the enemy action first always and every time, so therefore, look at the ground from the enemy's point of view, stand one mile, two miles, 400 yards, 500 yards out of your area of responsibility and say now if I was the attacker how would I tackle this particular piece of ground. What are the approaches? What

quantum of troops can come on those approaches and what will be the enemy's pattern of attack? The answer to this question will give you the deployment of anti-tank resources and MMGs. That is all the answer you want from the consideration of approaches at this stage. The crux of defence, the basis of defence is either your medium machine guns or your anti-tank layout. You have to hold that piece of ground against enemy infantry and enemy tanks. So, therefore, if you deploy your anti-tank and medium machine guns correctly, you have got the most important answer.

The second question is what ground dominates these approaches and should be held. You are appreciating a situation. It is only a question of analysing what ground dominates; you have said there are three approaches, A, B, C. Now along those approaches what are the pieces of ground which dominate them. Domination is both by fire and observation. If it is only domination by one, i.e., observation, it is not so good a piece of ground as the one which dominates both by fire and observation. Then you come to the next piece of ground. This also dominates. Which is the better of the two? A comparative analysis should be held, resulting in the fact that you get a number of platoon and company localities depending on your level. At battalion level you will get a number of platoon localities. Once you have your platoons then you group them so that they become company localities. A thorough analysis of the ground factor is vital. You have seen the approaches, then you come back along the approaches; walk mentally, if not physically, over them. If you can walk physically, if you have the time, it will be better, otherwise walk mentally over those approaches and come to the centre of the area of your operational responsibility and say, right, these are the pieces of ground where I should have a platoon here, and a platoon there.

The third question concerns the available troops and how to hold the ground. This is assessment of the task. You have said I want to hold so many platoon localities as a battalion commander—you may have 18 platoon localities which are to be held, whereas you only have 12 platoons available. In tackling this question always think two down. As a battalion commander think in terms of platoons, as a company commander think in terms of sections. Then you get the correct answer. Then only you will decide which of these localities are to be held. You have now analysed approaches, analysed the ground thoroughly and then you come to the conclusion that with the resources available to you, you can hold so many localities.

What obstacles—natural or artificial—can I incorporate in my defences is the fourth question. This is a very important thing because you have got to stop the enemy. You must make use of a natural obstacle if you can. If you have not got a natural obstacle, which you may not always have, then you must create artificial obstacles such as mines and wire and incorporate them in your defences to make them strong.

The fifth question is: How can I coordinate the firepower resources at my disposal to achieve maximum destruction? The aim in defence is attrition, defence is a battle of attrition. You have got to hit him and hit him hard at every stage right from his assembly area, FUP, right down the chain and you can only do it if you coordinate all your resources—artillery, mortar, medium machine guns and tanks. You kill the enemy by fire, you do not kill him by throwing stones. So, coordinate your resources to achieve maximum destruction.

If you analyse the defence by asking and answering these five questions, you will never go far wrong. There is no need of going through long-winded factors and deductions. All you want is answers to the five questions and if you analyse those correctly as outlined above, you will produce a good strong defensive layout.

BASIC ESSENTIALS—DEFENCE

While answering the above questions it is best to bear in mind the following basic essentials of a battalion defended area:

- (a) Organisation in depth. Forward and depth localities must be based on phases of enemy assault. In sitting localities depth is essential and localities must be so sited that they cannot be written off in one phase of the enemy attack.
- (b) Concealment of localities and firepower. The strength of defence lies in concealment. On knowing the location of defended localities, the attacker who has got the initiative and has got the resources, will play havoc into them. He will plaster them with all the artillery, all the air power and everything he has got. It is essential that localities and the main firepower i.e., medium machine gun, anti-tank guns, must stay concealed till the last moment. They must never open up till the attack develops.

All firing from defence initially must be from alternative positions or temporary positions outside your battle positions.

- (c) Centralised control of tank, artillery and medium machine gun resources to bring maximum fire down at the right time and place. Unless there is centralised control, this cannot be achieved.
- (d) Localities capable of all-round defence and mutual support.
- (e) Plans for local counter-attack or reinforcement. At battalion level, deliberate counter-attack is rarely possible. There are not enough resources, all that is possible is a local counter-attack. The enemy has gone through all that curtain of fire, he has gone through the wire, the minefields, the obstacles and has had a lot of casualties. Once he arrives on the objective that is the time to throw him back by a determined local counter-attack. One must have these plans for local counter-attack and reinforcement. Timely reinforcement pays dividends.
- (f) Domination of surrounding areas by aggressive patrolling. This is where the conduct of defence comes in. It must be ensured that the enemy does not get a lodgment anywhere in the defended sector.
- (g) Obstacles to be protected. It is of no use having obstacles if they are not protected. Rivers, canals and wire must be protected.
- (h) Good communications are essential to exercise control.
- (j) Shadow patrol over likely approaches and spoiling attacks. In the conduct of defence, once localities are sited covering the likely approaches, then along these approaches in the final stage of the defensive battle shadow patrols are required. What is a shadow patrol? A shadow patrol is two bodies with a wireless set or some means of communication who lie doggo. They conceal themselves and can stay easily in any type of ground whether it is plains, mountains, desert or jungles. They watch the enemy coming along the approach to his assembly area and towards the forming up place and once he has come in, they bring down everything on him. Such patrols, provided they are determined and have the initiative, can beat back the attack

before it hits the objective. By this means the definite target is known and blind sporadic firing in defence is avoided. What are spoiling attacks? Once defence is organised and preparations are complete, the forward defended localities will take a long time to bite. It will take a battalion perhaps days to overrun the company in defence. But in our teaching in tactics we telescope everything, we say a company is written off in four hours or three hours. A company in defence will take days to bite if it is properly organised and based on the principles outlined above. What are the depth localities doing when the attacker is tackling the FDLs? Use resources in depth localities for spoiling attack. Position them in a suitable place near the likely enemy FUP. The attacker is most vulnerable when he is in the FUP or coming into the FUP and once he is there and the moment he starts attacking, play hell into him from the flank by use of tanks and infantry, thereby defeating the attack.

ATTACK

In the case of attack, as in defence, consider five questions, remembering that both attack and defence are complementary:

- 1. What ground must I capture and hold? As an attacker you look at the enemy's defences from all angles and decide what ground you must capture and hold—remember, not only capture but also hold. So reorganisation is a basic essential. First, what ground must I capture and hold? The answer is the enemy's important ground or whatever is in depth or whatever is more important than the other pieces of ground. It is nothing but a detailed analysis of the objectives.
- 2. How much can I capture now? In tackling this you must again think two down, you have got to think two down whatever your level of command. The analysis will result in giving you the detailed objectives and phases of attack. The answer must relate to the quantum of forces available to you. It is essential to remember that you have not only to capture the objectives but have to hold them also. This will give you your objectives and phases of attack along the various approaches.
- 3. How am I going to get my troops from where they are now to actually occupy the ground I have to capture? This is the most important question. Detailed examination of this gives you the

movement plan complete. Remember the aim is to capture the enemy localities. A good commander must be economical. In World War I, there was a stalemate. Trench warfare was so prolonged that neither side could capture the other's trench systems. And then the tank was evolved to give mobility to resolve that stalemate. Tunnels were dug underneath, miles and miles of tunnels were dug in the battle of Loos. Troops erupted from behind the enemy trench systems. But in the attack now you cannot sit and start digging tunnels. So you create an artificial tunnel, a tunnel of fire by which your flanks are secure and you sally forth on the selected approach on to the objective. This will give you your forming up place, it gives you your assembly area, it gives you your direction of attack, it gives you your phases, in fact the entire movement plan.

- 4. What supporting arms are required/available and how best to use them? You may require a hell of a lot, you may require three medium regiments and two field regiments and a lot more, but you will not get them. You already have your movement plan. Now your fire plan must dovetail into that movement plan to enable you to create an artificial tunnel.
- 5. How quickly can I capture the objective? The more time you give to the defender, the more organised he gets and the more strong he will get. It is essential to capture the objectives at speed. The analysis of this will give you your timings and the earliest and latest H hour.

BASIC RULES—ATTACK

In answering the questions remember the following basic rules:—

(a) Information must be full and complete. I cannot reiterate the importance of detailed information. Most attack plans go haywire because you do not have enough information, and the most important source of information is patrolling. Unless good effective patrolling is done, no attack will succeed. Information must not be vague. It must be exact and indicate where the automatic weapons are located and their likely arcs of fire. You have to create that artificial tunnel to get to that objective. Unless you have detailed information you will not get results.

So remember that information must be complete and full. Regardless of the time taken, it is essential that information must be available before you start an attack.

- (b) Planned reconnaissance. View points, outline plan of recce. Unplanned reconnaissance often gives the show away and one has to be really rigid about it. You must from the word 'go' have a reconnaissance control centre established and lay down a rigid time-table for all recce. Then only you will conceal your direction of attack. After all, the defender can only be surprised if you attack from an unexpected direction.
- (c) Simple flexible plan. Do not make the plan too complicated, do not make it too rigid. No attack plan will go through as originally evolved; otherwise warfare will be a very simple matter. The enemy is there, he is also clever; so keep the plan simple. The simpler the plan, the more chances it has of success. In peace-time exercises you can make it as complicated as you like and try and be a clever guy and fool others, but in war you will not fool anybody.
- (d) Deception of the enemy as to the time and place of attack. This is the only way you can deceive him, the fact that you want to attack is no secret to the defender. It is only the time and the place. Hence the importance of patrolling and planned recce.
- (e) Select objectives suited to your resources. You cannot bite too much. If you have not got the resources, it is pointless trying to capture too many localities.
- (f) Protection of flanks of attacking force. Unless the flanks of the attacking force are protected, the attack will not succeed. It will peter out at the start line or anywhere upto the FDLs.
- (g) Reserves held ready for exploitation or counter-attack. No plan will work as planned, so you must have reserves suitably positioned for either exploiting success or for counter-attacking if you are thrown back.
- (h) Firm base/bases. The basis of all tactics is fire and movement and one leg on the ground. Tactics have not changed, it is still

fire and movement which is the basis of all tactics. All attacks, all movements must be covered by fire. So the attack must progress from a firm base and carry on securing firm bases. Your initial firm base is your FUP, then you start towards the objective. The Americans call this not a start line but the line of departure because you depart either to heaven or to hell when you go into attack. They call it very correctly the line of departure. Remember that you are not firm. So firm base/bases is most important in attack.

In combined infantry tank attacks the two arms must never be out of supporting distance of one another and both must be given maximum fire support. Most attacks in the future, in plain country, are going to be combined infantry tank attacks. There is no such thing as the infantry man fighting his battle alone or the tank man fighting his battle on his own. There is a tendency in our army to think in watertight compartments. If the armour boy thinks he is superior to the infantry man because he is sitting in the tank, it is nonsense. They both are alike. They are both fighting the same war. A troop of tanks, a platoon of infantry with two RCLs, two MMGs that is the combat team and that can hold ground much better in the plains. Similarly in the attack, a company with a squadron, closely integrated—a battle group is ideal. The task is to capture the objective and it is a team of infantry and tanks which will work, which will produce results in battle supported by the artillery, supported by all the others. Therefore, in combined infantry tank attacks the two arms must never be out of the supporting distance of one another. When the tanks are moving, the infantry is giving some support. If the infantry is moving then tanks are giving support and both must be given maximum fire support: then alone your battle group, your tank infantry group, will work.

ADVANCE

The doctrine of advance as it is current today is a legacy of World War II. The advance pamphlet was written for the western desert where vast open spaces were available with plenty of intervening distance between opposing forces. In the context of the limited war we are going to fight, if and when we fight, there will be no such long advances. Today, as in a jigsaw puzzle, mobile troops, vanguard, and the main body are all strung out

on the axis regardless of enemy air threat. Look at the havoc that enemy air craft will play on the column strung out on the axis over a distance of 15 to 20 miles. In our context all that is needed are points of entry. You know you have to advance. No one will allow you to advance formed up in this manner. That is why we came to grief in 65 operations because we were formed up vanguard, advance guard, mobile troops on the main GT Road, and before we started we were stumped. What you want is points of entry and as many points of entry as you can into the enemy's territory, so that your forces are dispersed and are not vulnerable to air attack. The first initial ingress has to be at night. Again in our advances we start thinking of a harbour and rest. I do not know why an advancing force wants rest. Anyway the tendency is to go into the harbour at 3 O'clock in the afternoon. There is no question of rest once you get into battle in the advance. Remember the cardinal principle is maintenance of the momentum. The pressure must be maintained. The Indian Army is not going to fight a six-year war. It is going to fight a two-month war at the outside. The resources are not there, the backing is not there, no other country will support you.

All you can fight is an intensive war for one month or two months' duration. Nothing else. Therefore, once the advance is started, there is no question of any halt. It will be advance both by day and by night and no question of going into a harbour at three in the afternoon. The momentum must be maintained and what is essential is that at each of the points of entry you have got to have correct grouping and order of march. This is very essential, so that at the correct time, at the correct place the resources are available to you. Further, strict control of movement is essential. Do not allow unplanned movement.

The first question is: What are the avenues of approach into the enemy area which can give the best chance of success and throw the enemy off balance? A careful assessment of this is most essential to achieve success. The points of entry should be such that they are not obvious and, therefore, strongly defended. The main axis should be avoided for the major thrusts. This can subsequently be used for the follow-up of the advancing forces.

Secondly, what combat groups can I deploy on these avenues to enable quick capture of nodal points behind or on the flanks of the enemy holding successive obstacle belts (natural or artificial)? This is really an assessment and allotment of troops available. Quick capture of key communications centres or nodal points situated in depth behind the lines of

successive obstacle belts, which of necessity the defending enemy must hold to stop the advancing forces, is vital for success.

The third question will be how to maintain continuous and relentless pressure on the enemy (quick capture of nodal points by follow-up combat groups). There is no question of any let-up or halt during the advance. This can be achieved by early capture of nodal points or key centres on the various avenues of approach.

Fourthly, how must I ensure continuous and maximum fire support for my advancing combat groups? It is essential that maximum fire support is continuously available for the various combat groups advancing, dispersed over a wide front. This requires careful judgment, thorough planning and detailed orders. For it to be effective, maximum use may have to be made of air transport and helicopters which are available for the supply and stocking of ammunition at the various gun areas.

The fifth question is: What administrative arrangements are necessary to maintain these fast-moving combat groups? Most advances are held up because administrative support does not catch up. This also requires detailed and careful consideration in the planning stage. All available resources of civil and army, as also air transport support must be used.

TASKS—PROTECTIVE DETACHMENTS

The basic tasks of any protective detachments are as under:

- (a) Send information—hot news quickly. This is important and is very often forgotten. You are there and you are in contact, so you have got the tendency to say to hell with the rest. But there is a battalion coming behind you or a brigade coming behind you, the brigade commander wants to know, the battalion commander wants to know so have somebody earmarked to just pass information. This can be the 2 I/c of the company or a subaltern or somebody you may get hold of, but minute-to-minute information must be sent back for the successful conduct of the advance. Then the person sitting at the back will be able to plan properly.
- (b) Protect the axis. Does not matter which axis, whether it is a track or whatever you are advancing on, your main task is to protect it like a boxer protects his belly. The basic rule in boxing is never to uncover the belly. Similarly the protective detachment advancing along an axis must never uncover it.

- (c) Brush aside minor opposition if within resources. The moment you meet opposition you must try and overcome it. That it's your task, but remember in doing so you do not jeopardise the major task of protecting the axis.
- (d) If not within the resources, then fix the axis. Form a firm base and take all steps to further the higher commander's plan. Find or secure some OP or bite a bit of the objective. Your job is to fix the axis and take all steps to further the higher commander's plans. You must do it, then alone can speed and momentum of the advance be maintained.

WITHDRAWAL

In withdrawal, the main thing you want to do is correct appreciation of the enemy's actions. He is not going to just rush headlong as you do in peace-time exercises. He also is scared of casualties and will be cautious. So appreciate what he can do in a given period of time, when he can attack you. If you are holding a delaying position, how can he attack you and with what quantum so that you can slip away intact. That is the aim of withdrawal.

Now the five questions:

- 1. Up to what date and time can I hold my present position (time of denial)? This is very important. Correct appreciation of the time of denial is essential for the successful withdrawal of troops. You must analyse it carefully and get as near the correct answer as possible.
- 2. What strength in men and weapons is required on the present position to maintain an intact front (minimum force)? An orderly withdrawal is only possible if a correct analysis of the minimum force which is required on the position to meet and withstand an attack up to the time of denial is made. You should neither over-insure nor under-insure.
- 3. What strength in men and weapons is required on the present position to simulate an intact front (rear parties)? Remember that the rear parties should have adequate strength to simulate an intact front. They should be adequately mobile and hard hitting, detachments, a combat team, of a troop of tanks, platoon of infantry with two medium machine guns and two antitank guns in a company locality. These are adequate to

simulate intact front and can also get away without much botheration.

- 4. How am I going to ensure a clean break (strict control of movement—detailed planning)? A clean break is most essential for this. It is essential that thorough and detailed planning is done regarding every element of the force, You must think of every sub-unit down to the last man and vehicle to ensure smooth movement and very strict control is required.
- 5. What other measures can I adopt to impose maximum delay and destruction on the advancing enemy (obstacle belts—stay behind parties)? You always keep the enemy far away from you so that he cannot hit you. For this a very carefully worked out obstacles plan, as also use of stay behind parties is most helpful.

PRINCIPLES OF BREAKING CONTACT

- (a) Get rid of all non-essentials. Whenever you are in operations, do not take heavy baggage. The normal tendency when going in operation is to carry everything. You must be ruthless so that you are mobile when you start the operation.
- (b) Depth sub-units out first. Day withdrawal is a rare case. A planned withdrawal is invariably a night withdrawal. A day withdrawal is forced on you, so get your depth sub-units out first.
- (c) Rear parties to cover best-defined approaches. Make maximum use of mobile firepower and the best ground for it. The task of the rear parties is to simulate an intact front. You cannot maintain it; minimum force maintains an intact front. The rear party simulates. There is a big difference between maintaining and simulating. While maintaining you have to have a semblance of holding that position, all your FDLs must be held. By simulating all you need is to show your presence. Simulation is best done by mobile firepower; by use of the battle groups. The strength of the rear party should just be adequate to cover the mobile firepower resources deployed.
- (d) Simple flexible plan. A withdrawal will never go according to the plan, hence the need for simplicity.
- (e) Go into minute details. This is one operation where you have to really think right up to the last man and piece of equipment,

How you will pull him out, how you are going to do this, how you are going to do that? Unless you have gone into the minutest detail some hitch will develop here or there.

THE ESSENTIALS

- (a) Maintain an intact front till the time of denial. It is very important, otherwise you will have a running fight. The Minimum force maintains an intact front.
- (b) Organisation of withdrawal to ensure a clean break—not a clear break, but a clean break. You have got a clean break, otherwise you get into a running fight and once the running fight starts it ends in a shambles.
- (c) Avoid tight timings. Give your subordinates little more flexibility, give them a block. Do not get down to the last minute because if you do, the unpredictable will happen and you will again be facing difficulty. Avoid tight timings.
- (d) Importance of surprise—when—what time. Remember the fact that you are withdrawing is also no secret to the enemy. The only surprise you can achieve in withdrawal is the timings of the withdrawal. Be unconventional, it is not always necessary that you start at last light, you may start at 2 O'clock in the morning.
- (e) Normal activity. In withdrawal it is most important that you have normal activity. Whatever has been happening in that defensive position must continue. The patrols must go out, the listening post must out so that the enemy does not know when you are going. You can only achieve surprise by normal activity.
- (f) Good traffic control. This is a must, otherwise people will be milling around all over the shop and you will get into a shambles again. The enemy is following up and unless there is strict control of movement things will go wrong.
- (g) The infantry aspect—discipline, morale and rumours. It is the most difficult operation of war to fight and to still maintain morale of your command because everything is adverse. You know you are withdrawing, you are running with the tail in between your legs. You know it and still to maintain morale is

something which requires the highest leadership. What happens to undermine that morale are the personnel from the rear echelons who sit in the administration area or base, come up and spread all sorts of rumours. They only want to see the tamasha for two hours, not get involved and then go off but for the time they are there, they have done enough damage to the morale of the battalion in contact. I am not decrying their fighting ability, but this is the normal human tendency. When a chap comes from the rear areas, he wants to magnify everything. Do not listen to rumours, do not allow your command to listen to rumours, otherwise their morale will go down.

CONCLUSION

As will be evident from a study of what has been stated above, it is essential to develop a correct and simple approach to tactical problems. This alone will help in quick analysis and evolution of simple plans. If the principles for the operations at battalion level are understood as also the question-answer technique is followed correctly, a sound plan can be easily evolved. Remember correct analysis of the enemy's actions and sound analysis of the ground are vital for success in the battle.

COMMANDING OFFICER AND HIS TEAM

LIEUT COLONEL Y A MANDE

T has been truly said that there is no such thing as a good or bad unit, it is only good or bad officers. In all their deeds, men reflect the personality of the commanding officer and his team.

In a highly paternalistic organization such as ours, a commanding officer enjoys a unique position. In a democratic society, he commands an organization which has a semblance of kingdom. But paradoxically, he is also a very lonely figure within the perimeter of his unit. Looking back towards his platoon and company commander's days, he finds himself gradually receding from direct contact with troops. His dealings with men are no longer intimate and he has to rely increasingly on subordinate officers. Much of his time and attention is therefore devoted to welding a healthy and reliable team of officers.

Much has been said on the duties of a commanding officer, leadership and man management. There is, however, a somewhat vacant chapter on management of officers and boss management.

In this article, I intend to analyse management of officers from the human relations angle. I was lucky to have attended a "management course" at the Administrative Staff College of India, Hyderabad. This article is based on management concepts advocated by experts in human relations and personnel management. Industries now clearly realize the importance of the man behind the machine.

ROLE

Let us first examine the role of the commanding officer as spellet out by management experts. The role of the chief executive in an organization, which very well applies to the commanding officer in a unit, is essentially twofold.

The first is to create a healthy climate within the organization where all subordinates find a suitable environment to give of their best. The second is to represent his organization before the outside world.

The emphasis is not on the commanding officer doing things himself but on creation of a healthy climate. It is wellnigh impossible for a commanding officer to do everything himself. He has to rely on others and hence maintenance of a healthy climate is vital. Managerial task for execution of any work has three stages:

	Planning
	Control
-	Supervision

The allocation of these stages at various levels of managers will be clear if we diagonally cut across the above box.

Planning	Top Managers
Control	Middle Managers
Supervision	Lower Managers

Thus the top managers have to do maximum planning, exercise lesser control and the least of supervision. Middle managers have to do a little planning and exercise reasonable control and supervision. The lower managers have to do maximum supervision, exercise little control and are required to do the least of planning. This will clearly illustrate the division of work within a unit between commanding officer, company commanders and platoon commanders. A commanding officer is more concerned with planning. He leaves execution to others. In a healthy unit, he does not bother about day-to-day routine work. His mind is, however, active with future plans. He involves himself in the routine work only if something goes wrong.

The second role is equally applicable to the commanding officer as the chief executive. He alone represents his unit in conferences, social gatherings and dinner parties. External liaison is a very important aspect of a commanding officer's role. He gets to know what is prevalent outside and endeavours to introduce good points in his own unit. It also affords

him the opportunity to present a true and brighter image of his unit to outsiders. There are many more important implications of external liaison, but here, in this article, we are concerned with the commanding officer and his team.

HEALTHY TEAM

With this brief on the role of the commanding officer, one may ask a valid question. How far can a commanding officer be effective in knitting a healthy team? What if the team he has taken over is a rotten one, full of friction and bickering?

The commanding officer alone, by virtue of his position, is capable of setting the house in order. In any formal organization, and particularly the army, the levels of authority, rank and duties are well defined. In such organization, it is easy to introduce new ideas from top to bottom. The flow of ideas, on the other hand, is very difficult from bottom to top. The commanding officer, because of organizational, structure, can easily bring about changes which he likes. Incidentally, this also is a pointer to those who crib about their own command.

Now that we are clear that commanding officer is in the best position to bring about changes, we can consider ways to knit a healthy and harmonious team. But before we tackle this question, let us also consider the models of management practices that a commanding officer has.

MANAGEMENT PRACTICES

Management practices and styles differ from man to man. Yet certain practices are easily discerned because after all every executive must have a model. I will now describe some of the commonly seen management practices.

Management by Scare. There are many executives who sincerely believe in management by scare. It is a fairly common practice in the army. During an informal chat, one of the company commanders stated that the only way of ensuring discipline in a unit is by inculcation of fear. Such officers invariably adopt a bullying attitude and believe in severe punishments. Adoption of such a technique is not without reason. For centuries, it was believed that man is born lazy, he only works when he is driven. The psychologists now think in a different way. According to modern research, man is not born lazy; work is a must for man and he possibly cannot live without it. But he works at his best provided the environments are suitable and conducive. For example, imprisonment despite all modern amenities is still a worse form of punishment because

the prisoner has no work, at least of his choice. There is another aspect to scare, bullying and losing temper. It is an excellent managerial means to get work immediately done. It has a benign short-term effect. However, continuous use of these tactics leads to exasperation and, at times, retaliation. Subordinates get used to it and therefore it loses its desired effect.

Management by Conflict: Management by conflict is interesting, but delicate to handle. Under this practice, seeds of discord are intentionally sown in the subordinates. The chief executive thereafter enjoys the fruits of conflict and individual loyality to the utmost. Let us take an example. A commanding officer on one fine morning calls the adjutant and says "Hello Ram, you are a fine fellow. The draft training instruction was a good piece of work. I am really glad the way you are working. I wish all officers work the way you do. Incidently, do you know something about Quartermaster? Subedar Major was saying that there is some hankypanky in men's rations. Anyway, keep it to yourself. Do not pick up a fight with Quartermaster. After all, right now, there is nothing against him and I don't think he is really all that bad." Some time later, the commanding officer calls Quartermaster and says "Hello Shyam, how are you? Nice to see you early in the morning. I forgot to tell you the other day when I went round the stores. I am very happy the way you are keeping stores and the system of accounting. You know how I view my 'Q'. It is a hub round which the unit administration revolves. With you, I should have no trouble. Keep it up. By the way, 'A' company commander, a little while ago, came to me. He is very happy with you. He said that you are very straight and impartial in your dealings with campanies. But he was cribbing about duties. He feels that his company is being given more duties by the adjutant compared to others. Well, I suppose there is nothing much in it. Afterall, some people do crib by habit." The commanding officer thus, in a very subtle manner, sows the seeds of discord amongst key officers. At the same time, individually he is very nice to each and every officer. The result is that subordinate officers work in suspicion and dislike of each other. They work very hard to show their superiority over others. Individually they admire their boss and become slaves to him. The commanding officer thus enjoys the loyality of each officer, benefits by their competitive hard work and gets to know all inside information of his unit.

INADVISABLE COURSE

As I have already stated, this kind of management practice is very subtle. One has to be a kind of psychologist to indulge in such practices. The flaw is that subordinates after some time come to know and when this

happens, the entire scheme boomerangs leaving the executives in a bad plight. It is, by any means, not a very advisable management practice for commanding officers.

Span of Control: There are certain commanding officers who very rigidly follow levels of authority and channel of control. Their span is very narrow. All orders are passed through the adjutant or quartermaster. They neither by-pass laid down channels nor permit subordinates any access. On the other hand, certain commanding officers mix freely with subordinates. Their span of control is very wide. They permit their subordinates easy access.

Narrow span of control leads to orderliness and avoids ambiguity. Many feel that it ensures good order and discipline. At the same time, narrow span of control is the root cause of red-tapism and delay. Upward flow of information takes time. From the human relations angle, the commanding officer loses that important thing called 'personal touch'. Narrow span of control reduces the work of the commanding officer but at a very great cost.

The wide span of control ensures a personal touch. The commanding officer gets to know what is happening in the different quarters. He is able to influence subordinates by his personality. Decision-making is faster as the commanding officer has a personal knowledge of the situation. From the human relations angle, a wider span of control is important. Subordinates no longer feel as various stages of machines in a chain. To them, it gives a great satisfaction to be able to speak to the boss. As long as direct access is not used as an instrument for accusation and backbiting, it does not lead to indiscipline. The commanding officer should neither indulge in finding personal information about his officers nor permit back-biting. Orders and instructions should always be issued through staff and proper channels. Wide span of control should only be used for a general feel of the pulse.

Centralization and Delegation of Authority: Centralization and decentralization of authority reflects yet another two viewpoints in management practice. Certain commanding officers keep all authority centralized. No decisions can be taken without reference to them. There are others who freely decentralize and delegate authority to others.

Centralization of authority is not conducive to the growth of an organization. It curbs the personality of the subordinates, who often find themselves helpless. A feeling of despondency sets in and subordinates

become clerical and mechanical. Centralization also leads to inefficiency, red-tapism and delay, because, after all, a commanding officer cannot do everything and in case he does, he has to take that much of extra time. Centralization reflects a state of mind of the boss who does not have confidence in his subordinates (may be because he has no confidence in his own self). Advocates of centralization say that it leads to avoidance of blunders and mistakes. Blunders are definitely bad, but is there really any thing wrong in committing mistakes?

Decentralization brings about growth in the personality of subordinates. It is an excellent means for training them for higher jobs. No one will refute the benefits of decentralization. It reduces the work of the commanding officer and leaves him free for the primary function i.e. planning.

It is true that delegation of authority does not absolve the commanding officer of responsibility. At the same time, subordinates have to make mistakes. Mistakes are made by those who work. Shirkers are generally experts in the game of play safe. The art of management requires balancing of ultimate responsibility and delegation. It can be done by controlling critical points, leaving the rest to the subordinates.

HUMAN RELATIONS

Earlier, we had seen that a commanding officer is in the best position to knit a healthy and harmonious work-team. No work-team can be efficient unless the individuals who comprise it are mentally happy, and hence the importance of human relations. Not only should relations between the commanding officer and individual subordinate officer be good, but inter-personal relations between the subordinates should be equally good and healthy. The latter is perhaps more important.

The models of management practices will provide some clues to commanding officers for DOs and DONTs. It has become a common practice these days to present a questionnaire to the readers. The questionnaire technique is also suitable from the writer's point of view; he does not advise any thing but leaves it to the readers to judge. A questionnaire is attached at Appendix 'A' to test your capability for knitting a healthy team.

In his dealings with subordinates, a commanding officer has to take into account the generation gap and resolution of conflicts. Both these aspects need elaboration.

Today, the generation gap has become a topic on which everyone speaks. Strangely enough, this has always existed and will always exist. Long whiskers and shocking clothes (as we, the old, think) are only external manifestations of a desire for greater freedom, participation and search for something new. Unfortunately, those who are old are too rigid, whilst, the young have neither time nor in a mood to listen. A commanding officer will always have to face the problem of the generation gap. And what do the present young officers think, want or, in an industrial sense, demand?

Traditionally, the commanding officer, being the grand pater of the unit, is responsible for all activities of subordinates—be it official, private or social. Today, the younger generation feels that their dealings with the boss are purely official. The young officer feels that he is old and good enough to look after his off-office affairs.

The younger generation does not believe in Tennyson's couplet "Theirs not to reason why; theirs but to do and die." He wants an explanation. After all, participation has become the cry of the day. The younger generation's zeal for doing things in a new manner is often and frankly a source of nuisance for commanding officers. I will agree with most of commanding officers, that young officers today are a terrible lot. But on mature consideration, one has to accept realities. A commanding officer has to make certain deviations from his own values. This I do not think is appeasement or compromise.

In any society, conflict is natural and common. I do not think it is unhealthy either. Yet conflicts in subordinates, if not resolved in time, can ruin a unit. It invariably causes great concern to commanding officers.

When conflicts take place, the stress should be on resolution i.e. both parties should become friendly again. Conflict evasion, which is often practised, should be the last resort. Posting of one or both, keeping away from each other, are typical examples of conflict evasion.

No ready-made solution can be given for conflict resolution as the nature of conflicts vary. One thing, however, is certain that commanding officer should stay completely aloof, without partiality and favouritism, and should not display likes or dislikes for any subordinate. Subordinates generally give up conflicting attitude as a bad job when they realize its futility.

SUBORDINATES' ROLE

Subordinates, as individuals, have different views. It is but natural. At the planning stage, they should freely express their views. A good commanding officer will always listen to them. However, once a decision has been taken, subordinates should implement it as if it is their own decision. They should go out of the way to show that although the decision is not to their personal liking, it has been implemented to their very best. In due course, subordinates will realize that this is a better way than keeping quiet and brooding over it all the time.

In inter-personal relations, subordinates must realize the value and importance of team work. Our society is richer because all of us are different and have different ideas and values. If others do not see eye to eye with you, there is nothing wrong with it. The fact that everyone is working for the betterment of the unit to his capacity is sufficient ground for working in harmony.

In every organisation, society, unit and even in our families, there are some who are intelligent and capable, others are not so fortunate. It is the duty of those who are good to carry the rest. I suppose this is where goodness lies. When working under stress and pressure, often a feeling sets in "Look, I am working so hard and what are XYZ doing?" Think it cooly when XYZ were working hard, perhaps you were relaxing. The above feelings, although natural, are not conducive to harmonious functioning of a team. One has to learn to get over these weaknesses with deliberation.

Bickerings and quarrel amongst subordinates generally take place due to lack of work. The energy of the young should be utilized for constructive purposes. An officer to be a worthy member of team, must make some contribution to his unit. An officer can contribute in various fields such as sports, dramatics, gardening, photography, shikar, improvement of the mess, unit institutions and so on.

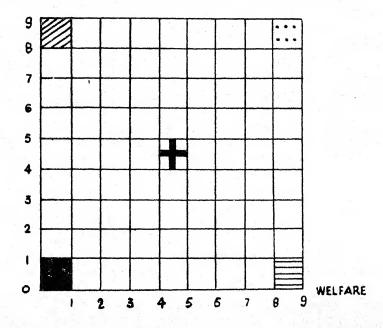
Surely, officers should be able to find some useful hobby for utilization of spare hours. I feel that Para 14 (b) of ACR for officers below 10 years should be modified to read "Has the officer made any distinctive contribution to his unit, if so in what field?"

PLAY SAFE

In any unit, the most difficult type of trouble creators are play safe types. They are shrewed people, who instigate others without involving

themselves. It is essential to identify the play safe characters. Understanding of managerial-styles grid is essential for this and other purposes.





The above grid takes into account two aspects of an officer's functions i.e. determination to get the work done and regard for welfare of men. Each aspect is graded from 1 to 9. All officers irrespective of their rank fit somewhere in this grid. Let us take some typical cases.

1x1 () type of personality is purely theoretical. There can be no officer who has no interest whatsoever in work or welfare.

1x9 () type of personality represents those people who are only interested in getting work done. They are bullies, hard task-masters who have no regard for welfare of men. This of course is an extreme case.

9x1 () type of personality once again represents case of degenerated trade union leaders, who are only interested in welfare and votes, least bothering for output of work.

9x9 () is a very desirable kind of personality. It represents real leaders, who, when it comes to work will extract every ounce of energy from men, but, when it comes to welfare,

will go all-out disregarding, if necessary, all rules and regulations. Few belong to this category. It is some thing for which all officers should strive.

5x5 (), placed in the centre of the grid, represents interesting characters. They do just that much of work and get just that much of work done which is essential for retention in the service. Also they pay only that much of attention to welfare of men which is necessary to keep away from trouble. Their knowledge of rules and regulations is good and their motto is play safe. Industries classify such characters in a category who must be sacked after one month's notice. Unfortunately, such characters are found in plenty in government organisations, and Services have a fair share.

The managerial-styles grid is important in many ways. For self-analysis, it is important to know where we stand in the grid. Right now, we are concerned with identification of 5x5 characters who can be a source of maximum headache for their bosses due to security in government organizations.

The company and sub-unit spirit sometimes leads to strained relations between subordinates. In their mistaken zeal for goodness, subordinates are apt to lose sight of the systems approach. Systems approach to management is important at all levels of functioning. Systems approach, in brief, means that some particular action at a particular period assumes overriding importance in the activities of various units or sub-units. It is, therefore, essential that all units and sub-units should forget about their own and concentrate on fulfilment of that important activity.

The efficiency of a unit depends on the commanding officer and his team. According to management concepts, the primary role of the chief executive is to create a climate wherein subordinates can work freely. Officer management is therefore an important aspect. The commanding officer plays an important role in knitting a healthy team. A good team is built by good human relations. The commanding officer must remain impartial, understand the generation gap and resolve conflicts which are natural amongst subordinates. Subordinates, on the other hand, must realize their code and learn to live in harmony with each other.

al e service e se est sur se Graf Schuller en describe Schuller est remark de la company

Appendix 'A'

YOUR QUALITIES FOR KNITTING A HEALTHY TEAM

- 1. When you hear a group of your officers having a good laugh and enjoying themselves, what are your reactions? Do you think:—
 - (a) They are idling their time?

or

(b) They are talking something about you and having a laugh at your expense?

or

- (c) Feel sad that, being a commanding officer, you cannot always join in their fun and frolic?
- 2. Do you think about personal matters such as leave of your officers yourself or you wait till they ask you?

(Note:—I know of a commanding officer who after hard work, such as training, used to leave signed casual leave forms with the adjutant with instructions to fill up details and let those officers go who want to have a break.)

- 3. When you are fired by your seniors, do you repeat it to your subordinates?
- 4. Do you call your subordinates every time work crops up or wait till the specified period?

(Note:—I know of a brigade commander who used to call his staff officers once in the morning and give them all the points. Thereafter he used to call them only while leaving office unless some immediate work was required.)

- 5. Do you permit your officers to see each other freely and sort out their own problems or insist on following proper channels?
- 6. Do you believe in a tea-break during office hours where all officers meet each other and sort out their problems?
- 7. Do you carry any thing for your officers while returning from leave?

- 8. When a report from higher headquarters reaches your office regarding indiscipline on the part of one of your subordinates, what is your reaction?
 - (a) Punish the subordinate because a report has come from higher headquarters.

or

- (b) Cover him up.
- (c) Investigate and punish, if necessary.
- 9. Having punished your subordinates, what are your feelings?
 - (a) Proud, because of your strictness.
 - (b) Normal, as if nothing has happened.
 - (c) Somewhat sad, because of the painful part of your duty.
- 10. Having fired one of your officers, do you :-
 - (a) Avoid his sight?
 - (b) Continue to harass him?
 - (c) Call him for a glass of beer at the earliest opportune moment?
- 11. When your are called upon by your seniors to explain irregularities in your unit:—
 - (a) Do you blame your subordinates?
 - (b) You accept it as a challenge for improvement?

JUNIOR LEADERSHIP TRAINING

MAJOR S J S AHLUWALIA, PSC

T present, there is a vast complexity of subjects which a junior leader has to master to be proficient in his job. We also have the young officer, the Junior Commissioned Officer and the Non-Commissioned Officer. Is there a need for all these categories and can the Junior Commissioned Officers be dispensed with? If so, how is this phasing out to be achieved without causing dislocation and loss of morale? Also, in view of the complexity of subjects to be mastered, what must the junior leader be capable of and how best can the training of our junior leaders be organised and carried out?"

It is clear that even a nuclear conflict will be very much a junior leader's war. This is all the more so in our country where in the mountains and impenetrable jungles bordering our frontiers and the consequent dispersal, the junior leader is very much the man of the moment. No well-organised army can afford to dispense with the initiative of its subordinate leaders, for it is one of the determining factors in modern warfare.

The be all and end all of an officer is to be a leader. It is a mixture of example, persuasion and compulsion or in other words, projection of one's personality. Personality encompasses courage, initiative and knowledge. Therefore, in times of peace, knowledge and education, and in times of war, outstanding bravery and capacity for comprehensive understanding shall constitute the basis of a leader's claim to his position.

FOUR CATEGORIES

In the army, we have the following categories of junior leaders:

(a) Company Commander —Major-Capt.
 (b) Platoon Commander —JCO.
 (c) Section Commander —NCO.
 (d) Young Officer —Subaltern.

If we analyse the role of each category, we come to the conclusion that a young officer has really no place in the chain of command. It, therefore, leads us to the logical conclusion that a young officer, if he is to be properly trained to be of any use to the service, must be given responsibility and training appropriate to his rank and service. It is only correct to say that a young officer should start his army career as a platoon or equivalent sub-unit commander. What is then the place of a junior commissioned officer in the army? This is a debatable question. There are some major drawbacks of this rank which necessitate a change in the existing system.

This rank is a legacy of British rule and, like many other such legacies, has become an anachronism after Independence. The institution of JCO, which served as a link between the British officers and the Indian soldiers, is now outdated and outmoded. Our army today is commanded and served by men coming from the same stock, having common customs and traditions and the JCO rank no longer fits. Moreover, training for modern warfare calls for a young, energetic and educated mind both to comprehend its multifarious problems and to evolve correct solutions in peace and in war. A JCO, because of his advancing age and lack of education, fails to fill the bill.

A smooth phasing out of JCOs, without affecting the morale and functioning of the army, could be done over 10 years—the same as the normal tenure of a JCO before retirement. With the present rate of recruitment to the officer cadre, it would be reasonable to assume that this period should suffice to train the required number of young officers to replace the JCOs. Besides, during this period, a sufficiently large number of NCOs would also have been trained to meet enhanced requirements.

PHASING OUT

The phasing out of JCOs may be carried out as under:—

- (a) Phase 1. Naib Subedar Adjutant and Naib Subedar QM can be dispensed without much difficulty as the Adjutant and QM give direct orders to BHM and BQMH. There is indeed no need for duplicating these appointments by giving them to JCOs.
- (b) Phase 2. All JCOs from the Support Company of the Infantry battalions and 25% JCOs from all arms and services: these vacancies should be filled within five years by carefully selected and well trained NCOs.

- (e) Phase 3. All JCOs holding platoon or equivalent commander's appointment and 40% JCO from the services: the institution of Subedar Major should also be brought to an end during this phase.
- (d) Phase 4. Remaining JCOs be replaced either by junior officers or senior NCOs depending on the level of responsibility and the nature of the appointment.

It is sometimes said that any change-over from the present rank structure will adversely affect the economy of the country. This is a fallacious view. Over and above his pay, a JCO is entitled to free rations, free accommodation, free water, electricity, furniture and free clothing, which together add up to the pay of a young officer. Since it is proposed that at least 40% of the appointments held by JCOs be taken over by NCOs, it will be seen that this proposition is not only more economical but also more efficient.

A certain amount of awakening is already noticeable in the minds of our troops who are conscious of the fact that most of the JCOs are a liability. Even so, the present set of JCOs may be absorbed in the BSF, CRP, NCC and such other para-military organisations.

It is a natural corollary that the new generation of NCOs should be given incentives in the form of better pay and better service conditions and more opportunities to improve their level of education so that more of them can get commissions in the officer cadre. This will boost their morale, resulting in greater efficiency and contentment.

There is a general belief that character, personality and energy are more desirable qualities in a junior leader than pure intellect; nonetheless, it is a fact that some of the decisions he has to make today are harder than those facing his predecessors. Furthermore, these decisions must appear sound to the men whose standard of education is already fairly high and will be much higher in the coming years. The problem has to be viewed from yet another angle. Some of these junior leaders will in due course reach positions in the army where their lack of intellectual achievement and the consequent lack of confidence inspired by them will prove disastrous.

To achieve professional efficiency, which in turn will develop confidence, it is of paramount importance that the selection and training of junior leaders should be flawless.

NCO's TRAINING

The concept of junior leadership emerges from a section, which is the smallest sub-unit in the chain of command. The future NCO will have to shoulder greater responsibilities, face greater hazards and be capable of learning more and more. The selection of NCOs should, therefore, rest on merit and not seniority. A very rigid and high standard, including the following, should be laid down for selection of a jawan to Lance Naik or equivalent rank.

- (a) Army Second Class Education.
- (b) Physical and mental robustness.
- (c) Leadership qualities.
- (d) Intelligence.

This may sound ambitious, but it will pave the way for producing good NCOs.

After selection, a Lance Naik should be put through a course of rigorous training on the following lines:—

- (a) Prepare for Army First Class Certificate of Education.
- (b) Weapon training.
- (c) Field-craft.
- (d) Leadership training.
- (e) Practical map reading.

On completion of training, he should be placed under an experienced section commander and gradually given responsibility to handle the troops. He will thus gain experience and develop confidence expected of a keen, reliable and aggressive young leader.

The training to be of any use will have to be continuous, and promising NCOs put through refresher and advance training courses at each stage. It would be desirable that each NCO undergoes at least one specialist course so that we not only have sufficient trained NCOs for the job but also enough in reserve to meet any contingency.

So far the training, of young officers, particularly the infantry, has been at the mercy of the whims and fancies of Commanding Officers. Only recently, some concrete steps in the right direction have been taken to remove this shortcoming. The Syllabus Revision Committee has made some useful recommendations in regard to the qualifying educational standards for entrance to the NDA and IMA. The syllabi to be taught in these institutions will lay more emphasis on knowledge of science which is becoming increasingly

important to understand the technical working of complicated arms and equipment.

The introduction of Young Officers' Course at the Infantry School is another welcome innovation which will go a long way in giving these officers a good start as platoon commanders. It will not be out of place to mention here the need for reviving the old practice of attaching young officers of the services to infantry battalions. This not only helps in developing a better understanding on their part of the needs and difficulties of the troops for whom the Services exist, but also builds up their leadership qualities.

TRAINING CYCLE

The training cycle for the young officers should be of three years as under:—

- (a) First year. Young Officers' Course, leadership course and familiarisation with troops.
- (b) Second year. Serve with a platoon and train in practical handling of troops with emphasis on outdoor exercises, short camps and internal administration
- (c) Third year. Scientific Orientation Course, documentation and command of platoon.

The training will have to be broadbased. Every opportunity must be provided to young officers to develop their intellect and professional knowledge to give them confidence as good leaders of the men they command.

In peace or war, the category of junior leaders, which includes officers holding the appointment of Company/Squadron/Battery Commander, is by far the most important. To my mind, it is the company commander who most influence the training, morale and discipline of men under his command. He is the one who knows his men intimately and is thus in a position to mould them into a well knit, trained and highly disciplined team ready to give of its best in combat.

It is unfortunate that the company commander is given the least importance in our present-day army. He is considered to be readily dispensable and is therefore most of the time either detailed on a court of inquiry or some other such odd duty and is seldom available to command his company. The sooner we realise it, the better it would be for us that the command of a company is a full-time job and that the company commander should be allowed to spend most of his time in training and knowing his men.

Before an officer is given command of a company or its equivalent sub-unit, he should have the following experience:—

- (a) Under-study of a trained Company Commander, for a minimum period of six months.
- (b) Junior Commander's Course.
- (c) A short management and work analysis course.

On successful completion of this training, he should be given command of a company, and then be given complete freedom to train his command within the broad framework laid down in the battalion training instructions. Training should be based on maximum practical handling of troops in the form of TEWTs and OUTDOOR exercises eschewing the written 'bumph'. This training cycle should last over an uninterrupted period of six months in a year and culminate in a battalion exercise to ensure cohesion.

To achieve this, concentrated effort at all levels is necessary. One of the solutions to this problem may be giving all the administrative duties, i.e., court of inquiry, station boards, provision of guards for various installations and VIPs and so on, in a brigade to each battalion for four months in a year.

Similarly, within the battalions/regiments, administrative duties should be performed by each company in rotation for two months. This will give sufficient time to subordinate commanders to train and administer their respective commands efficiently.

CONCLUSION

It has been rightly said that in the final test of battle, no matter how good the equipment, how brilliant the strategy, how excellent the commanders, success or failure of any army depends largely on the outcome of months of training. An effort has been made here to highlight some of the salient junior leadership training problems as we face them today and certain suggestions have been made to overcome them. The complexities of modern warfare, the rapid advancements in the field of science and technology, lead us to the definite conclusion that the new leaders will need to develop their mental faculties much more than their predecessors to keep pace with the fast changing tides of time.

No weapon has yet been invented and no plan of defence worked out that could subdue the fighting spirit of a well-led army. The old maxim that "ten good soldiers wisely led, will beat a hundred without a head" will always hold good.

RETHINKING MECHANIZED INFANTRY CONCEPTS

RAVI RIKHYE

TILL recently, the Indian Army had little reason to be concerned with mechanized infantry concepts as the army possessed no such formations. Today, however, a conservative estimate would place the number of mechanized infantry battalions in the Indian Army at 12, and with the 1971 war having showed once again the need for mechanized infantry to work with the armoured regiments, we may expect this number will go up to about 20 battalions in the next five years. It is, therefore, time we began devoting serious attention to mechanized infantry concepts.

Right to the end of the 1960s, the mechanized infantry debate, even in the advanced countries, concerned itself with an elementary point: should the armoured personnel carrier (APC) be used as an armoured taxi with troops riding into the battlezone but fighting dismounted, or should troops fight mounted? The dismounted school was centred in the United States, the mounted school in Germany. Only now, younger US Army officers are beginning to point out there is more to mechanized infantry than arguments whether mounted or dismounted tactics are best. This article presents the new thinking with regard to mechanized infantry.

THE DRAGOON CONCEPT

'The Dragoon Concept' is a Convenient label for the new concept. Dragoons were heavily armed European cavalrymen who fought dismounted. Their American counterparts were the rifle-armed US Cavalry who, notwithstanding what spaghetti westerns would have us believe, almost always fought dismounted. Just as the air cavalry is the descendant of the light cavalry, the mechanized infantry is the descendant of the heavy cavalry.

The Dragoon Concept simply says that since APCs are almost light tanks in their size and armament, better use can be made of them than simply 25 armoured trucks. While APCs, such as our own OT-62 and the

US M-113, may not at first sight resemble light tanks, the Soviet M-1967 with its 76mm gun and the German Marder with its turret-mounted 20mm cannon and two 7.62mm MGs are easily seen to approximate light tanks. Any APC can be armed with ATGMs and given the firepower of a medium tank combined with the agility of a light tank.

THE PRICE

The M-113 costs about \$30,000; the OT-62 probably costs much the same. These APCs are, however, inadequate for a high-intensity war. The Marder and the yet to be produced US Mechanized Infantry Combat Vehicle are in the \$100,000 category and thus clearly approach light tanks in price as well as capability.

A mechanized infantry battalion, depending on its organization, might have 50 APCs. If the commander of an armoured brigade left a regiment of light tanks lying around as mere infantry transport vehicles, he would be accused of being a poor and incompetent commander. Yet by using the APC only as an infantry transport, this is exactly what we are doing. In an armoured division, where we have 200 APCs with the mechanized battalions, the situation is even worse because we are underutilizing four regiments of light armour.

The Dragoon concept basically calls for the use of APCs as light armoured cavalry after the infantry has been disembarked. The APCs can be used either independently or together with the dismounted infantry and can be used in any light armoured cavalry role. The concept gives a brigade commander a fifth manoeuvre battalion and a division commander an effective force of 12 manoeuvre battalions to work with.

Before we proceed to organization and deployment, it should be understood that the US school of thought notwithstanding, there are occasions when mechanized infantry should be mounted. As a general rule, we employ the infantry to clear a way for and to protect the tanks: when the going is rough or there is heavy enemy opposition, this job has to be done dismounted. When, however, opposition is light and fast-moving operations are underway (the Germans in Russia, 1941-42; the Israelis in the Sinai, 1967) the infantry must remain mounted unless the APC is totally unsuited for mounted combat. The Dragoon concept is inapplicable during such operations: it becomes feasible only when dismounted operations are conducted and the APCs consequently are sitting parked idle.

Four distinct areas of deployment can be foreseen for our APCs, which we can call the Minimum Mounted Force. The MMF can be either a

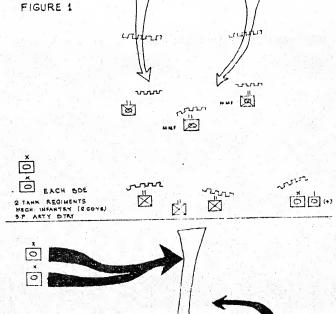
[0]

platoon, company or battalion. Divisions may at times effectively utilize larger forces of two or more battalions, but battalion or smaller forces will be used commonly.

The MMF can:

- (1) Conduct breakthrough, link-up, security, defence, fire support, withdrawal and resupply operations.
- (2) Carry out diversions, deceptions, limited offence, and provide area defence against a numerically superior enemy.
- (3) Provide a rapid reaction force to support the assault echelon, a follow-up force mopping up small pockets of resistance, and a self-sufficient fire support element.
- (4) A general purpose light, flexible reserve.

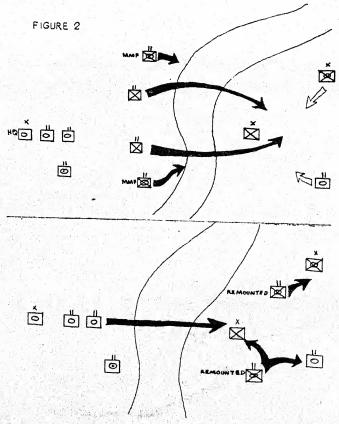
In the mobile defensive, the MMF would screen the infantry 10 to 50 kilometers ahead of the most advanced infantry positions. In the face of



the enemy attack, the MMF would keep falling back either to prepared or hasty positions: it would wear down the enemy at each successive position but make no attempt to stand and fight. It can thus inflict maximum damage at minimum cost to itself. The infantry would, in the meantime, be preparing heavily defended positions backed by self-propelled artillery. The MMF would lead the enemy right on to the defending infantry and artillery, get out of the way, let the infantry and artillery break up the already weakened enemy attack, and then remount the infantry for the pursuit while the tanks move to destroy the disorganized enemy. (See Figure 1 on the previous page)

RIVER CROSSING

In an assault river crossing, the MMF would cover the infantry as the latter is lifted across the river line in helicopters. Once the infantry is landed, the MMF deep wades the river to continue giving support. The armour crosses only when the bridgehead is firmly established. (Figure 2)



In both cases, it will be noted the MMF allows the tanks to be kept intact for the crashing blow; in the first instance to destroy the enemy, in

the second to exploit the infantry's breach of the enemy's defences. Today, when ATGMs give the defender massive A/T capability, it is essential to keep our tanks under cover till the last possible minute. This minimizes their casualties. Tanks are best used concentrated for a heavy blow, yet the infantry needs tank support against fortified enemy positions and armour. If our tanks are detached, we lose the effects of concentration. If we fail to support the infantry, the infantry cannot advance or defend. The MMF allows support of the infantry while saving the armour for more important uses.

From the above descriptions, it is obvious the MMF is to be used essentially the same way as the British employ their armoured car reconnaissance regiments or the Americans their armoured cavalry squadrons (equivalent to British regiment). Only a minimum amount of change is required to convert existing mechanized infantry battalions to allow for MMF operations.

ORGANIZATION

With regard to manpower, depending on our present organization, few changes are required. The OT-62 has a three-man crew, which is ideal for the MMF, though in an emergency, two men will do. The addition of a third man allows a trained ATGM operator to be included and frees the commander to direct and control.

An alternative headquarters is needed in each tactical formation. The platoon, company or battalion regular headquarters will be with their formations; additional HQs are required to control the MMF. A platoon's MMF HQ might consist of a JCO, havaldar, and RTO; a company's might substitute a 1st Lieutenant for the JCO; and a battalion has sufficient staff to spare an officer and two men for the battalion MMF HQ.

Most countries have their platoon and company HQs mounted in separate APCs. If, however, we are using only three APCs per rifle platoon, we will need to cut down the platoon to 33 men $(3 \times 10 \text{ rifle sections}, 3\text{-man})$ platoon HQ) to make room for the 3-man MMF HQ which will have to ride in an APC instead of having its own APC.

For the Dragoon concept, each APC needs to be armed with ATGMs: these are easily installed on the sides of cupolas, with one APC equipped with a heavy ATGM (Harpoon) to every two equipped with medium ATGMs (Milan). This armament gives terrific additional firepower to the battalion.

There can be more to mechanized infantry concepts than simply assuming mechanized infantry is infantry riding armoured trucks into battle. The Dragoon concept allows us to effectively utilize APCs which, once the infantry has dismounted, are a liability: they must be parked in a safe area and manpower diverted to guarding the APC parks.

An APC armed with ATGMs becomes a light tank and it can be used as such after disembarking the infantry. The additional unit provided to the brigade or division commander allows him greater flexibility and more firepower than is normally available in his formation. The correct use of APCs allows the tanks in armoured formations to be kept concentrated and unexposed until the vital moment when they can cause the greatest havoc.

We need officers specially trained in APC tactics, just as we have tank, infantry, and artillery specialists to make maximum effective use of the APC.

REFERENCES

Though several sources were used for this article, special credit needs to be noted to:

- Captain Vernon W Humphrey, "Mechanized Infantry—What Next?", Infantry July-August, 1971.
- 2. Captain William J Starr, "Mechanized Infantry—A Closer Look", Infantry
 November-December, 1971.

Readers may also profitably consult:

- 3. Lt. Col. William E Klein, "Mechanized Infantry in Vietnam", Infantry March-April, 1971.
- 4. Brig. Gen. Jemes E Gibson, "A Case for Mechanized Infantry", Military Review, September, 1970.
- 2nd Lt. John Merwin, "Preparedness is the Key to a Good Mechanized Infantry Force", Infantry, January-February, 1972.

FEAR AND ITS EFFECTS ON COMBAT EFFICIENCY

SQUADRON LEADER K N PARIK

ROM cradle to grave, man is obsessed with and chased by fear in its various forms. Right from childhood, he is trained to fear wild animals, ghosts and a number of other things. As a young man, he fears the process of ageing as much as he fears death on becoming old. During youth, there are anxieties regarding service, family, loss of reputation, etc. Various apprehensions reach their culminating point, when the nation goes to war. Men conscripted during the war view with uncertainty the future that awaits them. A host of anxieties arise in the mind of the enlisted man—fear of hard military life, the fate which may befall his family during his absence, and, to top it all, fear of death. Fear is a natural foe of fighting spirit, morale and discipline. It is imperative that it is controlled lest it may paralyse the war effort.

Now let us define fear and study its symptoms in the human body. Fear is an emotion caused by anticipated or an impending evil. It manifests itself as apprehension, terror, panic and dread. In a psychological study carried out on U.S. combat divisions, the following symptoms were listed, when men were struck with fear: violent pounding of heart, sinking feeling in the stomach, shaking and trembling all over, cold sweat, feeling of weakness or feeling faint, feeling of stiffness, losing control of bowels and bladder. When stimulation increases considerably, it affects the central and autonomic systems, and on reaching a certain point, disorganisation occurs. The crack-up point practically paralyses a man and he becomes incapable of handling situations which have tensions and difficulties. This is a dangerous point and to avoid reaching it, ways of controlling it have to be devised. The methods of controlling should be effective and should bear instant results.

Fear manifests itself in various forms and its degree varies from individual to individual. When confronted with an awe-inspiring situation, some are likely to run away from the scene of occurrence. In wild life, small animals conceal themselves to escape the greed and rapacity of bigger and more ferocious animals. Human beings also resort to concealment.

Some men try to drown their fears by drinking liquor or use of drugs. Fear in extreme cases results in madness or suicide.

EFFECTS ON MORALE

The importance of combating the element of fear in a man can only be appreciated when its harmful effects on morale and discipline are taken into account.

Fear acts like an explosive which can shake the foundations of the splendid edifice of morale. Morale is based on discipline. In order to strengthen the edifice of morale, its foundation should be strengthened with the mortar and concrete of discipline. The greatest enemy of fear is discipline, hence the latter should be firmly embedded in the minds of all fighting men. Says Normal Copeland: "Indeed discipline can be defined as the art of looking fear in the face." There are various methods of inculcating discipline. Some of them are proper conditioning of men through strenuous training and exercises, instructions, example, creating confidence in weapon and equipment, etc. Team spirit also strengthens the group. In an ideal group, there is espirit de corps, camaraderie among the individuals deriving strength from one another, thus adding to the inner strength of the group to stand up to a common danger on challenge.

A group without morale and discipline is easily exposed to the dangerous effects of the enemy's shock tactics, which are especially aimed at knocking them down. This can be appreciated when we compare and study the behaviour of a disciplined army with an indisciplined mob. The disciplined group thinks and acts as a whole as each individual gains strength from the other. In a mob, one panicky individual wields an unhealthy influence on the other, as each individual thinks and acts on his own. The mob easily breaks up on account of lack of co-ordinated action and objectives.

Under no circumstances, should men be kept in darkness or ignorance. When men know what they are up against, and how to meet the challenge or threat posed, they bring forth their best energies for the tasks before them. Fear pertains to the region of uncertainty, and matters of which one has no definite knowledge or information. It is like a cancer which eats away the very vitals of the human body, doing incalculable harm imperceptibly and quietly. In the interest of morale and discipline, the men should be informed about their own and enemy troops and general plan of battle. Lt. Gen. Sir Frederick Margan, describing the policy followed at his COSSAC (Chief of the Staff to the Supreme Allied Commander)

planning headquarters, writes, "Right down to the cook, they were told what had happened, what was happening, along with their part in it and what it was proposed to do next. If men are kept well-informed, fear can be hunted out of men's minds."

Let us now study tactics adopted by the enemy to cause demoralisation, panic and fear and also ways of controlling panic in various situations and circumstances of battle e.g. attack, defence and withdrawal.

SHOCK TACTICS

From times immemorial, the opposing forces have capitalised on human weaknesses, especially those created by shock and surprise tactics. Man is the central figure in war, whatever form warfare may take—conventional, guerilla or atomic. The belligerents follow shock tactics so that the enemy may be broken down psychologically. Jenhiz Khan won over his enemies not only through superior generalship or tactics, but also by creating psychological effects of fear. The reputation of ruthlessness of his armies reached the enemies well in advance, as a result of which they were awe-stricken and broke down psychologically. Albert J. Glass, in his investigations, has revealed that 15% to 25% of men can handle tough and tense situations. The remaining 75% to 85% men reach the point when complete mental break down or capacity to take action occurs. In the latter cases, there is a tendency to take negative action that is flight to a secure place or concealment.

Many methods to counteract the above-mentioned tendencies have been suggested. Ability to withstand shock depends on combatworthiness and training of troops. In selecting men for services, ability to withstand shocks could be introduced as one of the criteria. Secondly, to enable men to face such enemy tactics, standard drills and exercises covering extraordinary situations should be made a part of recruits' training. During war, it would be more advisable to follow laid down drills than to wait for elaborately chalked out plans from the commanders.

Sometimes, the enemy resorts to shelling to gain certain tactical and strategic advantages, e.g., to demoralise the opponent, inflicting heavy casualties in shape of wounded and dead by prolonged and intensive shelling. The shelling gives rise to panic very often and results in loss of balance of the human system.

During training period, men should be made accustomed to bursting of shells and their resultant noises. Such battle inoculation should be an

essential part of their training. In actual shelling, men may be advised to plug their ears with cotton. The commander should maintain contact with his men, either personally or through runners with a view to creating confidence in them. Once the shelling stops, full control over men should be resumed. It should also be appreciated that greenhorns are more susceptible to shelling. The uninitiated should be mixed with veterans or battle-hardened troops, so that the latter may keep them under control during shelling.

CONTROL OF FEAR

Now we shall discuss how fear affects the men during three phases of a battle—attack, defence and withdrawal—and also the means of counteracting them.

- (a) Defence. Defending a position requires long waiting for the men. They also have suspense created by uncertainties of the situation. To counteract this fear, the commader should maintain contact with his men and keep them well informed about relevant points concerning the situation. Since loneliness encourages fear, the trench should be manned at least by two men. The men should be provided adequate practice in recharging and reloading magazines during their training in peace time, as it creates confidence and raises their morale when he is faced with a defensive situation.
 - (b) Attack. During attack, the enemy's defensive fire opens, which immobilises or pins down the attackers. Group solidarity comes to nought and each man is left to fend for himself. The commander should maintain contact with the troops personally or through runner to keep up their morale, to give them relevant information and orders.
 - (c) Withdrawal. Since withdrawal is considered as a sign of defeat, troops making withdrawal are sticken with fear. To counter fear, the plan for withdrawal should be carefully worked out in detail. Provision of food, rest and medical facilities should be arranged. The commander should be behind the withdrawing troops, nearest the enemy.

As far as possible, when troops are defending a position, or immobilised during the attack by intense dive-bombing or artillery fire, the troops should be occupied with some useful activities. The troops should have a

feeling of optimism and conviction in their victory. They should have solid team spirit and should be confident that each individual in the group is ready to lay down his life for others. Troops should be informed of the worst as well as the best, and should in no way be mystified or remain in uncertainty. Copeland has suggested that troops should be told anecdotes, dealing with the past glories of their regiment. This will inspire self-respect and feeling of importance.

IDEALS AND MOTTOS

Every unit and regiment should have inspiring ideals and mottos. Cromwell inspired his troops with divine ideals and made them feel as if they were divine instruments specially appointed, and called forth to execute divine judgement. In Mahabharata, the Pandavas were convinced of the righteousness of their cause and fought for their ideals. Sir Archibald Wavell has narrated the following incident about Napoleon, which showed his psychological insight of the minds of his men and his appreciation of the need of giving right ideals to them. "When as an artillery officer at the siege of Toulon, he built a battery in such an exposed position that he was told that he would not find men to hold it, he put the placard 'The battery of men without fear' and it was always manned." This shows that men must realize their own importance, maintain their self-respect and should not be made to feel that they are mere slaves.

CONCLUSION

Methods of controlling and combating fear in various situations and circumstances have been discussed above. The importance of combating fear in the interest of fighting efficiency, maintenance of morale and discipline should be appreciated by officers at all levels. We should not, however, forget the basic fact that fear is born in the minds of men and hence the battle against fear can be waged in the mind itself. Fear is not an un-natural phenomenon. It is present in every human being. Its degree determines the thin line between cowardice and bravery.

METEOROLOGY AND WAR

GROUP CAPTAIN S DAS SARMA

THE citizen of our day is generally aware of some classical instance of military history wherein mighty armies have been defeated more by weather than by the opposing forces. Napoleon's "victorious army" was miserably defeated in its bid to conquer Russia primarily due to the early advent of the severe Russian winter.

In the course of World War II, the mighty army of Hitler was halted and routed at the gates of Stalingrad (now renamed Volgograd) in spite of its initial numerical, material and technological superiority over the opposing Soviet forces. The severe Russian winter was again a major contributing factor.

Books on military history often repeat the adage that "Weather plays a vital role in all military operations". But the average reader—not knowing the mechanism of utilisation of weather information in the conduct of war—is always inclined to ask the "military meteorologist" the question "how do you fight in the war?"

The question is undoubtedly logical and sincere, but the "military meteorologist" is generally at a loss to decide as to how much he can elucidate, and how much can be conveyed.

Looking on the panorama of war as a whole, we find that in each of the Armed Forces and at every stage there is ample scope for the meteorologist to help in the planning and execution of operations. For operations in the air, on land, on the surface of the sea, and even over and under it—the meteorologist can help (and does help) in defensive and offensive operations.

IN THE AIR

For aircraft operations, the contribution of the meteorologist has to start from the earliest stages of thinking. Where should the airfield be located? In which directions should the runways be built? What should be the length of the runways for operations in summer conditions?

The "suitability" of the location of an airfield naturally depends on weather conditions of the locality and the primary purpose for which the airfield is desired to be used. The directions of the runways are to be so adjusted as to be in line with the most prevailing winds for a very major portion of the year. The length of the runways must be adequate for providing adequate "lift" to the operating aircraft even under unfavourable summer conditions—when the air pressure is low and the temperature high. And in all such matters, the meteorologist must help. The meteorological data carefully recorded, processed and summarised over many years are utilised by the meteorologist for his contributions in such matters.

Once the airfield has been constructed and aircraft are in position, the mateorologist is called upon to help in several other ways. What is the general pattern of weather, and what are the peculiarities? Which are the adverse weather elements to be treated with greater care? What are the extreme conditions likely to be experienced? What is going to be the weather for today and tomorrow? If adverse weather is expected, how soon would it come over the airfield? Are the aircraft in the air to be called back, or diverted to other airfields?

In the training of aircrews, framing programmes for exercises and operations, in the planning of sorties for different types of missions—the meteorologist is always in the picture. He has to keep his vigil day and night, he has to anticipate the questions from the aircrews and operations staff and keep his answers ready. He has to provide a clear picture of the existing weather and of the weather to come. He has to issue warnings of adverse weather well in advance, so that safety of aircrews can be ensured, and the aircraft properly secured while on the ground.

Aircraft are highly expensive and complicated equipment, and our aircrews are even more valuable. The meteorologist has, therefore, the moral responsibility of contributing to the best of his ability in conserving our aircraft and aircrews. His contributions are not counted in terms of money, primarily because he helps to "prevent". Prevention is against losses in men and materials, as also against failures in missions.

When a supply operation is in full swing, the "failure" of a mission does not merely result in burning of several thousand gallons of fuel for no purpose, it also results in vital supplies of arms and ammunition or food and clothing "not" reaching their destination. Such supplies can spell the difference between victory and defeat of an Army formation engaged in serious battle, or between life and death of a group of people under

conditions of natural disaster. In either case, the meteorologist must come up with his information and advice as to when (and through which routes) supply missions of this nature can be "successfully" carried out.

FOOTBALL FIELD

Success can take various forms under different conditions. During the earliest stages of the Jammu and Kashmir operations, the only "airfield" available to us in the plains of Jammu happened to be the *Maharaja's football field*, not far away from Jammu city. It was a grass-covered field and could become soft and slushy after the winter showers.

Our Operations staff knew this very well, and also knew that aircraft getting bogged in slush so near to the raiders could become "sitting ducks" for the pot-shots of enemy pilots or of sneaky infiltrators.

However, our courageous pilots operated regularly and extensively their fighter and transport aircraft from this "football field", with an understanding. And the understanding was that "Met" would give them the "signal" just before the rain, for them to get away to other airfields in the rear.

This arrangement worked beautifully. Our (inadequate) resources of aircraft operated to the maximum possible extent from Jammu under this arrangement. In one instance, the Commander himself disregarded Met advice (for reasons of his own), and got bogged for three days; but luckily for us, the enemy could not take advantage of the situation. Within a short period thereafter, the Engineers provided a somewhat better runway (PBS), and the anxiety was reduced considerably.

Under active operational conditions, the commanders and planners require weather information and weather forecasts fairly frequently. They must know which sectors are fit for which type of operations and deploy the air resources accordingly. If alternative targets are included in the basic plan, then they must know which alternative can be tried first with the best prospect of success.

For certain types of tasks, the weather situation may be really marginal. For example, when the task-requirement is that there should be no rain, and the weather situation is such that "it may or may not rain" when the aircraft are to be over the sector of interest—the Commander has again to summon the meteorologist. Calculated risks have often to be taken under the pressure of circumstances, and the Commander has to assess the extent of the risk before giving the green signal for the task concerned.

Even in the course of tackling the intruding enemy raiders, the pilots automatically take adequate note of the weather elements, and sometimes utilise them to considerable advantage. To quote a classical example from World War I, we may mention the case of Germany's ace fighter pilot, Capt. Albert Ball, who was credited with "downing" at least 43 enemy aircraft during that war. He used cloud-cover, the position of the sun in sky, and the visibility conditions in swooping down on his enemy—practically unobserved.

There have been later examples of utilising the jet-streams (fast-moving wind-currents at high altitudes) for raiding well beyond the normal radius of action.

The knowledge and experience that our aircrews and operations staff imbibe during their periods of training and operational flying are invariably related to meteorology. Aircraft operate in the atmosphere, and meteorology is the science of that atmosphere. The more the Air Force knows about the weather, the better equipped it is to take advantage of it.

The mere existence of a blue sky (fine weather) does not lessen the burden on the meteorologist. He must know how far the dark clouds are. And then, embedded in the blue sky are phenomena like the mountain waves, jet streams and clear-air turbulence—all of which are liable to affect the operation of high-speed aircraft operating at comparatively high altitudes. In fact, clear-air turbulence also affects flights at lower levels by conventional and jet aircraft. The effects of mountain waves are felt at progressively lower altitudes with increasing wind-speeds and under some conditions; the jet-streams occur at much lower altitudes than normal.

"Cease-fire" does not provide a respite to the Met officer. His normal duties have to be resumed with undiminished vigour in the service of training and operational exercises. He has to review whatever has been done, and prepare for the future when more will be demanded from him than previously.

LAND OPERATIONS

The three cardinal points of consideration for the land forces are—the terrain, the weather and the enemy. From the very early days of his training, the army officer is repeatedly told to consider these three cardinal points for everything that he is called upon to do.

It is also a fact that the weather influences the terrain—sometimes tremendously. Hard ground can become a soggy plain, some roads and bridges can be washed away, some dry desert areas can have flash floods—all because of just one weather element namely, heavy rain.

Many weather elements affect the army's operations. Snow and blizzard, fog and mist, rain and low clouds—all have direct effect on the army's movements and manoeuvres. If paratroops are to be dropped, the weather over the dropping-zone must be within specified limits.

On the other hand, reaction from the enemy is also conditioned to a large extent by the weather affecting the enemy. The maximum extent to which the enemy is in a position to react has necessarily to be continuously assessed in all defensive and offensive operations.

It is true that in a number of instances, our forces and the enemy may be equally convenienced or inconvenienced by the weather—fair or foul—but there are also plenty of instances in which one side or the other is more inconvenienced than its counterpart. And further, to utilise the opportunity offered by the weather at the right moment is a matter of intelligent tactics.

There has been at least one instance during the Jammu and Kashmir operations in which our tanks had progressed right up to the enemy stronghold under the cover of fog. If the same purpose had to be served by any alternative means (like laying a smoke-screen), the project would have been much more uncertain and much more hazardous. Credit lay in seizing the opportunity offered by the weather, and making the best use of it.

In many situations, the question is not "whether to attack", but "when to attack". The decision on timing is linked with a large number of considerations by the Commander. And one of the important considerations is the "expected weather". Other things being satisfactory, there is significant advantage in attacking as soon as a bad weather spell has just ended, and be able to "capture the objective and consolidate" before the second spell of bad weather. There have also been situations when an attack has been timed to coincide with bad weather for achieving "surprise", and with good results. Such timings had been tried out during the Jammu & Kashmir operations to considerable advantage.

In the larger sphere of the army's strategy, the weather assumes a correspondingly bigger role but on a wider scale. The climatology of the

prospective theatre of operations comes into play, and the supporting and logistics services have to fit in with the pattern. The composition and training of forces have to fit in with the pattern. And even the medical and rescue services have to be tuned to the same pattern.

The conditions of pressure, temperature, humidity and wind-chill determine the physical ability of the soldier to survive and fight. His equipment must survive the rigours of the same environmental conditions. His food and clothing, his means of transport, his backing of arms and ammunition—they must all be integrated into the pattern dictated by considerations of "the terrain, the weather and the enemy".

If the mountain passes behind him are expected to be closed, there is urgent need for adequate stocking and air-supplies. If the roads and bridges behind him are expected to be badly off, his engineer-support and air-supplies have to be provided for in advance. If the enemy happens to interfere with his supply-lines, immediate reinforcement by air may be the only feasible alternative.

Stocking and air-supply are again dependant on the weather. Stocking has to be regulated within the period that roads are passable. The stocked material has to be in the form that it can survive the weather. Air-supply has to be so programmed that temporary interruption owing to spells of bad weather will not result in undue depletion of stocks. How many days is the weather unfit for flying in that sector? Again we have to take recourse to the help of the meteorologist, and he comes up with the answer.

The land frontiers of our country—stretching over several thousand miles—consist of the palm-covered coastal regions, the arid deserts of Rajasthan, the riverine districts of Punjab, the prodigious and dizzy-heights of the mighty Himalayas, the treacherous jungles and swamps of Assam. The different regions provide a wide panorama of very diverse weather conditions—all of which the milltary meteorologist has to be familiar with, and study intensely for any future requirements of operations.

NAVAL OPERATIONS

Our country has the distinction of having the largest unbroken stretch of tropical seas in the south (the Indian Ocean), as also of being fringed on the eastern and western sides by the Bay of Bengal and the Arabian Sea. All these areas are the birth-places of terrifying tropical cyclones of great destructive potentiality.

Many are the merchant ships that have been lost in them and many are the harrowing tales of those who have managed to survive in spite of being near enough. Our frontiers on the sea stretch over two thousand miles, and our Navy must be ready at all times to guard the seas for defence of the Motherland.

The south-west monsoon rages over the neighbouring seas from May to October and is followed by the north-east monsoon which has its sway over the southern seas from October to February. The month of March again has the onrush of the southernly winds along with spells of thunder and heavy rain, leading progressively to the south-west monsoon.

It would be safe to say, therefore, that the Indian Navy has to be constantly prepared for adverse weather conditions while preparing to fight the intruding forces of evil—irrespective of the time of the year.

In order to fight in spite of the weather pre-supposes intensive and extensive knowledge of the weather conditions, as also the ways of escaping from the fury of the weather when necessary.

In addition to operations over the surface of the seas and oceans, new dimensions have been added to the Indian naval operations through the inclusion of the air arm and the submarine arm. It is thus not enough to know only the conditions on the sea and ocean surface, but also over and under it.

The success of naval operations would thus be determined through the knowledge and ability of our naval officers and men, as also through the meteorological support which has to be provided in considerable detail. Here, as anywhere else, the knowledge has to be gathered through long and careful observations, and intensive study of the available meterial—which (in fact) happens to be inadequate.

The inadequacy in the exploration and study of the Indian Ocean area was made evident through the adoption of the programme named as the International Indian Ocean Expedition—which concluded just a few years ago. While even this expedition has been sadly inadequate for so vast an area of tropical seas, it has at least resulted in many useful findings, and in pointing the way to future investigations.

COMBINED OPERATIONS

It would have been fairly evident (from the foregoing that the Armed Forces operating by themselves are influenced by the weather, and depend

rather heavily on the military meteorologist. As and when "Combined Operations" are undertaken (jointly by two or more Services), the influence of the weather becomes even more evident. Planning has to take account of the feasibility of operation, by the different Forces concerned, and also provide for the weather-limitation of one through increased activity of the others. The total force at the decisive points must not be less than the desired optimum.

In the course of World War II, the Supreme Allied Command of South East Asia was served by a "Joint Meteorological Centre" located next to its operational planning office. In order to ensure the requisite knowledge and expertise, military meteorologists of several Allied Nations were grouped together in this—namely of Britain, Canada, America, Australia and India. They cooperated magnificently in supporting the Allied combined operations over the Indian Ocean and the Far East.

Meteorological problems the service of the Defence Forces are very many indeed, and they are bound to increase with greater sophistication in equipment and methodology.

We must always be one up over the enemy, and foresee our future operational requirements. There is a tremendous scope, for progressively better utilisation of meteorological information, of specialisation in the requirements of the individual Services, as also of intimate co-ordination of expertise for Combined Operations.

Let the military meteorologist never forget how much he can contribute to the defence of his motherland even though he never fires a shot in battle.

This account of activities of the military meteorologist would be incomplete unless we also consider his depedance on the National Meteorological Service of the country (the India Meteorological Department). It is the National Meteorological Service that provides him the basic essentials.

The civil meteorological observatories and offices—which are the primary sources of synoptic meteorological data—are administered and maintained by the National Service. The National Service undertakes task of collection and exchange of meteorological data for the country as a whole, and ensures that the data are made available to the military. They manufacture a large variety of meteorological instruments and stores, which are used both in the civil and Services sectors.

The National Service is the custodian of all types of climatological information, and keeps on up-dating its records and publications for civil and military use. It undertakes special studies and investigations of various types and the benefits are equally available to the military meteorologist.

There is close co-ordination and perfect understanding between the National Service and the military meteorological services. It can safely be said that this understanding and co-ordination (between the two sectors) provides for the efficient functioning of the military meteorological services.

From the dawn of Independence, our country has been faced with raids, massive infiltrations and aggressions in various sectors from time to time. The Armed Forces have been confronted with a task of tremendous magnitude in defending our difficult frontiers; and happily for us, they have responded courageously and efficiently. Let us do everything within our power to strengthen the hands of the Armed Forces in their noble task, and in this, the contributions from the military meteorologists—supported by the National Meteorological Service—should for ever constitute a "significant support" to all our military operations.

ORIGIN OF SUMMARY COURT MARTIAL

MAJOR M P SINGH

(This article will bear more interest if read in conjunction with MIMI, Chapter II, Section 18).

Summarky court martial is peculiar to the Indian Army. In no other army, a Commanding Officer, who 'alone constitutes' the court, has the power of passing such sentence as a year's imprisonment. It will be of interest to go into the background and to trace the sequence of events which led to introduction of summary court martial.

The East India Company had no regular army until the Anglo-French Wars (1744-46) necessitated raising regular troops. Major Stringer Lawrence, in 1748, organised the Madras European Regiment and enlisted 2,000 sepoys. Simultaneously, a code of military law was prepared with the help of 'articles of war' then in force in England. Though in modified form, the 'articles of war' continued to exist under the denomination 'Rules for Mutiny and Desertion'. The officers commanding units had large powers and the discipline of the corps mainly depended upon them: they were indeed the last word and they could do anything according to their judgement. They could make new laws or break them according to the circumstances. Many of the offences could be punished by them, and only those of a very serious nature had to be sent for court martial. In the court martial itself, where the Commanding Officer usually presided, he had a good deal of power. Major-General Birch, Military Secretary to the Bengal Presidency Army, at Allahabad, in 1859, informed the committee which had been appointed to go into the question of reorganisation of the Army after the Mutiny, that there had hardly been any restriction on the punitive power of the Commanding Officers, for the only rules in that respect framed on the eve of army organisation in 1796 provided that 'every non-commissioned officer and soldier shall retire to his quarter or tent at beating the retreat, in default of which he shall be punished according to the nature of offence'. At court martial too, the procedures and composition could be changed as often as possible. Even though no sentence of a court martial, in which the

Commanding Officer of a regiment presided, could be executed till the garrison commander or the Governor had confirmed it, in actual practice this confirmation was seldom withheld. But in 1818, this dominating position of the Commanding Officer came to be questioned when forms of procedure were rendered more exact and the garrison commander was authorised to set aside the sentence of a court martial according to his judgement. This, in the eyes of the 'Commissioners', was the first step towards indirectly weakening the power of the Commanding Officer.

POWERS REDUCED

Though court martial procedures had been enacted in 1818, not until 1828 were regulations compiled for guidance of officers. The Commanding Officers had continued to exercise powers such as dismissing native soldiers and reducing non-commissioned officers, awarding corporal punishments, etc. On September 1, 1828, standing orders for the Bengal Native Infantry were compiled by orders of Lord Comberanere, the Commander-in-Chief, which took away such powers from Commanding Officers as dismissing native officers and reducing non-commissioned officers. The new orders limited their power to discharge the sepoys who, from bodily defects, sicknses or accident, became incapable of performing the duties required of a soldier. But in all other cases of unfitness for service, the Commanding Officers had to apply to the Commander-in-Chief for discharging sepoys. This implied that the Commanding Officers could not dismiss men as a punishment for offences committed.

It was not very long before attention was paid to abolition of corporal punishment. The Governor-General, Lord William Bentinck, ordered on February 25, 1835, against the use of 'rattan' in the army, as he considered a sepoy's character unsuited to corporal punishment. There was great resentment all over India from officers commanding units, but the measure was enforced since it had the sanction of the House of Commons and the backing of a Governor-General and the proceedings were formally recorded in House of Commons Paper No. 319 of 1836. The Commanding Officer's powers were further reduced by an order of the foreign secret department dated August 30, 1845, which limited the infliction of even minor corporal punishments to mutiny, insubordination, using violence againt superiors and drunkenness on duty.

REVISED CODE

Almost simultaneously, the re-enacted Articles of War (of 1845) sanctified a practice by which no Commanding Officer, except by a sentence

of court martial, could discharge as punishment a non-commissioned officer or a soldier. The Articles of War of 1847 enacted further that 'no non-commissioned officer shall be reduced to the ranks by the sentence of a court martial, or by order of the Commander-in-Chief of the Presidency to which the soldier shall belong'. The revised code of regulations, published in 1855, took away from the Commanding Officer even the power to discharge men who were physically unfit for service, which the regulations (already mentioned) had granted. All cases even of physical disability subsequently were required to be referred to the Commander-in-Chief of all the three Presidency armies stationed at Calcutta.

It is evident that the Commanding Officers had been made ineffective by the time the Mutiny came in 1857. The state of things had so deteriorated that the Commanding Officers did not really 'command' their regiments, because they had no power to punish. Major-General JL Mansfield, in 1859, narrated his experience as a commanding officer, before an inquiry appointed to go into the causes of the Mutiny, thus:—

If the Commanding Officer was to say to a sepoy, you have committed a fault, you will go for drill for seven days, the man would have power to turn round and say, 'I do not go to drill for seven days, I will be brought to a court martial', and the Commanding Officer has not the power to prevent it. I say with a system like this, it is impossible to command a regiment.

The only way a man could be punished was by a court martial and even in that case the Commanding Officer could use very little discretion. Another General, Pullock of Bengal Presidency Army, also told the 'Commissioners' that he had once ordered a court martial against an individual for 17 charges of serious nature, but the man obtained a pardon from the confirming authority.

PANCHAYAT SYSTEM

Recent research has shown that to the committee, it was fairly evident that the Mutiny of 1857, which was essentially a Sepoy Mutiny, originated because over the years, the Commanding Officer was so bound by regulations that he had no powers. The committee also noticed that one part of the army, namely, the Punjab Irregular Force, was disciplined and had not taken part in the Mutiny. The Governor-General, Lord Hardinge, desired the committee to draw a comparison between the Punjab Irregular Force and the rest of the Bengal Presidency Army. It was readily discovered that the discipline of the Punjab Irregular Force was good and this the committee attributed

to the almost paramount powers vested in the officers commanding those units; they could themselves deal with offenders promptly and effectively. Among the native corps, the 'panchayat system' or 'native court martial' was employed. The system had an unwritten sanction behind it and a certain number of native officers, with a Subedar as president of the 'panchayat', was all that composed the native court martial or panchayat. The court, though formed and convened by orders, was merely a private court and it was not 'tacitly' admitted; yet the decisions given were usually binding on both parties. There were no rules for the guidance of a panchayat other than the rules of common sense. The panchayat recorded its findings and recommended sentence to the commanding officer, but the recommendation did not include corporal punishments, which could, however, be awarded in addition by the Commanding Officer in case of disgraceful offences.

Thus the panchayat or native court martials were quickly organised by commanding officers of the Punjab Irregular Force to deal with offenders. Commanding officers had perfect control over their men which alone accounted for the lack of response to the Mutiny in that part of the army. When a new army came to be organised in place of the Army of the East India Company in 1859, it was appreciated that if recurrence of Mutiny were to be avoided, the commanding officer's hands must be strengthened. With this object in view, 'summary court martial', on lines of panchayats, was introduced as an experimental measure. In 1869, summary court martial was established as part of the 'legal machinery of the Indian Army'. It continues to exist today, though not without modifications.

BOOK REVIEWS

BEYOND VIETNAM: THE UNITED STATES AND ASIA

by Edwin O. Reischauer

(Published by Alfred A. Knoph, New York, 1968) Pp 242, Price \$ 4.95

THOUGH the title gives the impression that the book primarily deals with the consequences of America's Vietnam policy, it is primarily a long look into the future of American-Asian relations. The author, who is a professor at Harvard University, is a well-known specialist on Japan and East Asia and has been his country's Ambassador to Japan. The book has useful material for policy planners not only in the United States but elsewhere as well.

At the outset, he states that the war in Vietnam had slowed "the thaw in the frosty relations between us and the Soviet Union, thus affecting adversely the area of greatest peril in our foreign affairs" (p.4). He may not have foreseen the recent Nixon visit to Peking and Moscow where the great powers have arrived at important agreements despite Vietnam, yet his concern about the Vietnam problem remains quite valid. In the context of the recent intensification in American bombing of North Vietnam, his following remarks are worth pondering: "The bombing of North Vietnam is a case in point. Some have argued that the resultant increase in the pain of the war to the North Vietnamese would increase their willingness to negotiate. I find this unconvincing. In fact, the bombing may so build up their hatred and distrust of us that it increases instead their determination to go on fighting" (p.6). His suggestion that there should be a barrier at the 17th parallel appears to be unworkable. He also suggests a slowing down of the war (p. 16). We notice now that while a large number of American soldiers have been withdrawn from Vietnam, it has been coupled with increase in the ferocity of aerial bombing from American planes in both parts of that country. He makes an important point when he remarks: "Quite possibly a unified Vietnam under Ho, spared the ravages of war, would have gone at least as far toward the evolution of a stable and reasonably just society as has the divided, war torn land we know today" (p. 29). Such a Vietnam, in his opinion, would have been "highly nationalistic". According to him, the Vietminh movement drew its main strength from "nationalistic yearnings for a fully independent, strong, and modernized Vietnam" (p. 63). He is very clear in his mind that the United States could not be the policeman of the whole of Asia.

Referring to what he calls America's Asian problem, his criticism is that adequate attention had not been paid to his country's relationship with Asia. In his words: "We have not determined in what ways Asia is important to us, what are the basic problems we face there, and what we can do about them" (p. 45). The rest of the book is a laudable effort to provide the answers. On pages 48-49 and 50-51 he gives two maps of the world drawn according to the population and GNP, and the results are

quite surprising. But these weird maps make sense when it is remembered that while two-thirds of the people of the world live in the poor "South" of the world, nearly four-fifths of the wealth of the world is with the richer side. Per capita income in the United States is fifty times as much as in the poorest countries, and the rich nations are moving ahead faster than the poor ones. While he finds that only 3 per cent of American investment are in Asia and no Asian exports are crucial to America, and immediate menace to America from that no of the world, it is his view that prosperity, stability and peace in essential for a "truly peaceful" world. He is also interested in Asia as it develops a quarter century from now. He also foresees the Asian half of the world someday having "much more relative power than it does today" (p.55). He says in a prophetic style: "It will become more and more difficult for the world to continue half poor and half rich, half in turmoil and half at peace. An impoverished, hungry Asia will be a continuing drain on the rest of the world' (p.57).

Reischauer says that Asian leaders whether communist, socialist, democratic or elitist, all of them use these approaches to "the end of building, independent, self-respecting, strong, and prosperous nations" (p.76). While this is a refreshingly different approach on Asian affairs, he errs seriously when he describes Asian lands as "Hindu India; Buddhist Ceylon, Burma, Thailand and Cambodia; and Moslim Pakistan, Indonesia, and Malaysia" (p. 77). The recent emergence of Bangla Desh should convince him that even in the avowedly Islamic State of Pakistan, religion did not prove an adequate cementing force.

While discounting the idea of Asian leadership, he sees a big and useful role for Japan in the development of East and South Asia. Elsewhere in the book he refers to the talk in Japan of a Pacific Community consisting of Japan, the United States, Australia, Canada, New Zealand, and significantly, "in time, those countries, that qualify economically for membership (p.138). According to Reischauer the future of U.S.—Asian relations depends largely on "what Japan becomes and what it does" (p. 139). He considers China next in importance to Japan, finds its rhetoric bellicose but actions cautious. The real Chinese threat to the region in his opinion, lies in encouragement of subversion and insurgency. His view that "we have tended to overemphasize China's importance to us" (pp. 161-2) is quite interesting in the context of the recent honeymoon between the two countries.

He calls countries other than Japan and China as "rest of Asia", not a very pleasant description. He pleads for neutralisation of the mainland of South-East Asia while conceding the failure of SEATO. The chief hope for the healthy development in Asia, according to Reischauer, is "the nationalistic order of its various peoples" (p. 199).

He concludes by making some useful suggestions like greater resources for foreign policy planning, having a "simple, straightforward, and clear" foreign policy, and the need for cultural and intellectual contacts and to explain American motivations and actions. Finally, he gives the outlines of a more balanced view of world history. The book will contribute much to the understanding of U.S.—Asian relations,

CONFRONTATION WITH PAKISTAN

by B.M. Kaul

(Published by Vikas Publications, Delhi, 1971) Pp 338, Price Rs. 25.00

T is out of post mortems that future wars are won and I am sure that India's millitary strategists will study carefully the late Lt.-Gen B.N. Kaul's new book. Confrontation with Pakistan, It is mostly a post mortem on India's 1965 war with Pakistan. As a layman, I am unable to comment critically on his observations.

Curiously enough I got this book for review on the day he died and I do not wish to be too critical about him. He is again not very complementary about Gen. Manekshaw or Gen. Chaudhury for that matter. One thing about Gen. Manekshaw that I cannot forget is that he had been condemned by Mr. V.K. Krishna Menon and if Mr. Menon had continued to be Defence Minister for even a short time. Gen. Manekshaw might have retired as a Brigadier and India would have lost a great Chief of the Army Staff who defeated Pakistan in December 1971 very decisively. Who knows if Mr. Menon had remained, we may not have needed a Manekshaw at all.

Otherwise in "Confrontation with Pakistan". Gen. Kaul is prophetic and his thinking on lines with the powers that be in India. He talks of the need for a treaty with the Soviet Union and how Pakistan would get a bloody nose if it tried to have another war with India. On Bangladesh he says China's aim is to keep alive revolutionary association there with the ultimate idea of linking the two Bengals.

But to me the most interesting part of the book was his dissertions on the Indian National character, of the lack of discipline in national life, of how people still throw rubbish into their neighbour's yard. His solution for the problem of indiscipline in Indian national life is obviobsly a 'military one'. He feels indiscipline can be cured only by exemplary punishment. He mention a Chinese Emperor's success in bringing about discipline by chopping off people's heads. May be it can be achieved this way. Incidentally I am curious to know what success was achieved in disciplining people by military rule in Pakistan. Kamal Ataturk by an order got the people of Turkey to wear Western dress and outwardly at least Westernise themselves. But did the character of the Turks' change? I doubt it.

Nirad C. Choudhury blames the Indian weather for the Indian lassitude and carelessness and lack of discipline. He calls Indian old European settlers and wants them to regain their European personality, He himself has achieved this in his personal life. Former President Dr. Radhakrishnan once called for the need to change our national character. But both he and Nirad Chaudhury have no rough and ready solution as Gen. Kaul seems to have. By implication Gen. Kaul's book wants military rule in India. I at least do not want it though I am very much an admirer of the army myself.

THE LIGHTNING CAMPAIGN

by DK Palit

(Published by Thomson Press, New Delhi, 1972) Pp 166, Price Rs. 24.00

THE author in this book recounts how the Indian Armed Forces conducted a sophisticated military campaign with determination and finesse, and, at the end of 12 days presented to the world a new country—rarely ever done in the history of the world. Tracing the genesis of the present trouble, a number of authorities have now said that they had anticipated that the East Wing would break away from West Pakistan and in fact they are surprised that this tenuous union lasted a quarter of a century. No amount of true devotion to Islam could serve to bridge the ethnic and cultural distance between the West Pakistani and the East Bengali—one influenced by the fanaticism of West Asia and the other by the tolerant South East Asia. The history may have been different had the rulers of Pakistan treated the two wings on par in all respects instead of relying on Muslim sentiments and hate-India stance to keep the country united. Even Sheikh Mujib, though for quite some time de facto ruler of East Pakistan, never till early 1971, used his charismatic power to urge independence.

India could not be a silent spectator of the doings of simple funloving Yahya Khan and of 'Butcher of Baluchistan'—Tikka Khan. Besides emotional involvement, the mass eviction of refugees was a deliberate act of demographic aggression and a threat to Indian security, both internally and externally.

Soon after March 25, in and outside the Lok Sabha there were constant demands that India should intervene to stop the genocide. General Palit has assiduously brought out that the spring of 1971 was clearly not the time for the Indian armed forces to operate at maximum advantage as any action had the implicit risk of an all-out war. Basically any operation had to be spearheaded by Mukti Bahini. Later, the terrain in Bangladesh is not dry enough for mobile operations until mid-November.

The activities of Mukti Bahini have been sketchily described being based on newspaper reports. It is a marvel how such a fine force was built up in a short period which greatly damaged the economic life in addition to killing Pakistani soldiers to obtain their weapons. Besides, many centres of resistance grew up in the heart of Bangladesh which slowly sapped up the energies of Pakistani soldiers and completely demoralised them. There are many lessons to be learnt from these operations, particularly, as for the first time guerrilla warfare was extended to sea of which, again, a sketchy account is given.

As the preparation "for any eventuality" progressed, it became obvious that absence af an inter-Service joint command headquarters would hamper operations, as in Bangladesh the three services for the first time were to operate jointly with one overall aim and within the ambit of a single operational plan. Accordingly, a joint services headquarters was set up. The lesson for India is loud and clear.

Initially, in Bangladesh, General Niazi had been compelled to deploy his forces to protect the borders. His plan was to defend certain key centres and, when forced, to fall back behind Madhumati and Meghna rivers, Indian Command took full advantage of this strategy. Its troops moved forward, by-passing strong points thus cutting Pak defences into small bits and moved post haste to Dacca. This shattered Pak moral and threw their Command off balance. General Palit has brought out that the flexibility and informality which General Aurora displayed in the conduct of these operations greatly smoothed the way for victory.

In certain ways this is an incomplete book, as it fails to provide an overall analysis of the major events and an objective commentary which it set out to do. This is all the more disappointing as it is written by an ex-Director of Military Operations who claims to know most of the actors in the drama. Largely, it is a scissor and paste work and the book lacks objectivity. The author has given one-sided impressions that everything was honki dori with the Indian Army and it fought against a dehumanised military machine led by "Witless generals"! His treatment of the campaign in the West, where some bloodiest battles were fought, is rather cavalier; and so is his analysis of the contribution made by the Navy and the Air Force. For the Navy particularly this was its finest hour since independence though the author describes it always the last, perhaps an essential evil to be tolerated! The Air Force went all out to support the Army and contributed in no small measure to the latter's success. It averaged 500 sorties per day (and could do more) and its bombing missions were carried out with such precision that virtually no damage was done to civilians. The air-dropping of a para battalion with supporting arms is not a feat which can be repeated everyday.

It is one thing to write instantly about recent happenings, it is another to deliberate over and dissect them. Besides the lack of objectivity the author does not even forecast the effect of war on world, on Asia or on India. What is the position of India in this region and that should be done to check the cold war in the Indian Ocean, more so as ninety per cent of the Japanese oil, 40 per cent of the Australian and onethird of the British trade passes through the Indian Ocean? In fact, because it was written in haste there are a number of in accuracies in it like the circumstances leading to the sinking of INS KHUKRI. The book, however, reads well and various descriptions are vivid.

KD

WAVELL: SUPREME COMMANDER 1941-1943

by John Connell

(Published by Collins, London, 1969) Pp 317, Price 46 s.

THIS biography of lord Wavell which is the second volume of this authors' earlier work Wavell—Scholar and Soldier, and covers the period of July 1941 to April, 1943, during which time this most outstanding figure held the highest and some of the most complicated

Commands which fell to the lot of any high Commander in the Allied Forces during the course of World War II. How efficiently and objectively Lord Wavell completed his assignment inspite of the vagaries of his political masters is a saga in itself. It is no small measure of his professional capacities and personal integrity that inspite of personal dislike of him by Mr. Churchill, of which he was aware, he acquitted himself most honourably.

Between September, 1939 and June 1943 Lord Wavell directed some 14 campaigns in such dissimilar areas as the western desert North Africa, Eritrea. Somaliland, Abyssinia, Greece, Iraq, Syria, Malaya, Dutch East Indies, Burma and the defence of India, before he laid down his Field Marshals' Baton as a Commander for the last time.

Lord Wavell laid down the office as Commander-in-Chief of India to assume in 1943, the high and onerous appointment of the Viceroy of India. He was a great admirer of Belisanius, and like his hero, he himself found that most of his military Commands had large number of political problems attached to it, which he solved whilst fighting his battles. In all his compaigns whether successful or otherwise he acquitted himself with distinction and credit both as a Commander and as a man. And also like his hero Belisanius, gave a great example of how to serve with unselfishness and loyalty. Yet he received in return obstruction for his plans, suspicion and ingratitude. Inspite of this he was as free from rancour as he was from bitterness and carried out his duties, to the last in a way consistent with his interpretation of duty to his country and his sovereign.

This biography was written by John Connell, who died before completing the work, and the book was completed by Brig. Michael Robert himself a soldier and writer of ability, who completed this dedicated task with feeling and sympathy. In the rolls of higher Commanders produced by the World War II, Lord Wavell will surely occupy one of the highest position among the best Field Commanders produced by the Allied Forces. I think I am right in stating that like Rommel, Lord Wavell himself had become a legend in his life time, and during the course of his campaign was respected as a Commander of the first grade even by the enemies against whom he happened to be fighting. It is a pity that there is no complete comprehensive biography of Lord Wavell as a soldier and as a man on similar lines to that produced in the recent years on Lord Mountbatten because it would surely be a most educative work illustrating how well Lord Wavell himself measured up to his many requirements of Commander give in his lectures on Generalship. This book is surely a must for reading, of those aspiring for high command.

southern bon block to see

Swords For Hire: European Mercenaries In Eighteenth Century India

by Shelford Bidwell

(Published by John Murray, London, 1971) Pp 258, Price £4-00

In the 18th Century. Indian rulers particularly the Mahrattas who had a great tradition of martial valour behind them were worried men. Did the armies of the White traders in India have a secret weapon? These armies numbered less than their own, the troops were drawn from the local people like their own but led by White officers, their fire-power was similar—yet they won wars;

It was not long before they found out that the secret weapon spelt 'discipline'. The discipline of the European armies—method, order, drill—was alien to them and they began engaging Europeans to train their armies in this discipline. As the Mughal Empire crumbled, successor States organised armies of regular troops commanded by Europeans and the ere of the fabulous mercenaries began.

Indian traditions of fighting had to be given the go-by. Whole towns would move with the armise of the Indian Princes, supplies to the army being the responsibility of the civilians (tracers) who followed it. Families would stay with the army as the warrior had to have home comforts. Disastrously, there was no chain of command, the fate of the army depending on the fate of the Ruler who led it. If a King leading his army fell of his horse or his elephant, panic would grip the entire army; it was normally the signal for it to turn back and run.

Method was equally locking. For instance it would take minutes to reload the guns of Indian armies while those of European-led armies could fire almost simultaneously, the reloading being done in 15 seconds.

In Swords For Hire, Shelford Bidwell chronicles the saga of the foreign soldiers of fortune who served under the banners of the great Princes of India. Some like De Boigne raised a splendid army which won string of victories; Perron became a Mahratta Viceroy in what was left of Mughal territory; George Thomas annexed province for himself. They were the soldiers of fortune turned up by a swashbuckling era. Their cruelties and kindnesses, the squalor and splendour, are given in detail. Living it its pages are men like Skinner and Shepherd, to name only two. Some built churches, had Indian wives, some were deported, others made India their home. The brave Indian soldiers they commanded either stayed on in the diminished armies of the Princes or joined the British Indian Army.

Swords For Hire is the story of the European interlude in India which was to last 200 years before independence came in 1947 leaving behind certain traditions which have added to India's lustre.

MASTER AND COMMANDER
by Patrick O'Brain
(Published by Collins, London, 1970) Pp 349, Price 30s.

ASTER and Commander by Patrick O'Brain is a historical novel in the tradition of C.S. Forester. The hero of this book Jack Aubery is a half-pay lieutenant who is suddenly put in command of the Brig "Sophie". How he converts that vessel into a first class fighting ship and their adventures make for very interesting reading about the Royal Navy of the 1800s'. There is a good admixture of British and French Admirals as also of Spanish men-o-war of those days. The various characters have been drawn with skill & feeling. The narrative is well written and has a tremendous ring of the authentic, easy and very interesting reading. A book that will be a very useful and popular addition to any naval library.

KAY

THE SEA WAR IN KOREA
by Malcolm W. Cagle and Frank A. Manson
(Published by United States Naval Institute, Annapolis, 1957) Pp 555 Price \$6.00.

THE Sea War in Korea, an American Naval Institute Publication, written by commanders Cagle and Manson, U.S. Navy, is an extremely well documented and profusely illustrated book on the subject of the American Navy's Maritime Operations off the Coast of Korea during June 1950 and July 1953. The book is equipped with an exhaustive schedule of appendices which covers practically everything from the list of Commanders during this period, casualties, decorations, as well as statistics U.S. Naval operation in Korea i.e. number of sorties flown, number of tons of bombs used, as also the number of rounds (16" to small arms) used, in surface operations, which has the staggering total of 4,069,626 expended in a period of 37 months hostilities or say 3,700 rounds per day (of all types) during this period. The navel casualties were just over 2,000 during this period of whom the fatal were about 450.

That these operations were of a basically conventional nature, is too well known to be stressed at any length. This is a book not for the layman but perhaps for the Journalist, and certainly for serious students of war at Sea. That command of the Sea is a pre-requisite for military operations on land, at a point thousands of miles from the home-land of the attacking force is to beg the question. But certain valid salient points have been brought out in this narrative, like lack of skilled co-operation between ground forces and their tactical Air support by the American Air Force. The Naval Air Component which was skilled in this Art, was naturally in very small numbers and it took sometime to get a good working organisation into existence. The importance of mine sweeping on a hostile coast has been well brought out. A fair amount of the new equipment, which

the American Navy had acquired between 1945 and 1950 was used and presumably useful lesson learnt for their further improvement during the course of these operations.

The subject has been treated very sympathetically and naturally represents the American view points on these operations. In the conclusion it is stated according to the American press that whereas President Trueman achieved a successful result without damaging American world strategy, whilst rumours in the Military circles in America feel that the Korean War was lost Militarily, as well as psychologically because the means for defeating the enemy though available were not used. According to this book it appears that the American involvement in Korea was apparently an unclear policy and hence the execution was a failure. Both the authors served in the Korean area, and are to be complemented on the well documented "live" and interesting book, they have produced an important and necessary book for the Navy library.

KAY

ROYAL AUSTRALIAN NAVY 1942-1945

by G. Hermon Gill

(Published by Australian War Memorial, Canberra, 1968) Pp 753, Price \$ 4.00

OYAL Australian Navy 1942-45 is the second of two volumes written by G. Hermon Gill on the subject of Australia in the war of 1939-45 (Navy Series). This book whilst describing in minute detail the activities of Australian Naval Forces in World War II is full of maps and photographs, which make the book attractive and interesting. This book is obviously a Government Publication, though the views and opinions expressed therein have been laid at the door of the author. Whilst it is generally known and conceded that the Australian Defence Forces made a most magnificent contribution to the allied war effort during the years 1939-45 on land sea and air in spheres ranging from Australia across the globe, through the Middle East to Europe and the Atlantic, naturally the major naval efforts as a force was in the Pacific and Australian home waters. The get up of the book is good, but there are certainly several "printers devils" in the text. Unfortunately there is a certain amount of wrong information, given in the text, e.g. that Indian National Leader Chandra Bose whilst enroute from Germany to Japan was landed from a Japanese sub-marine in South India. The reference is no doubt to Subhas Chandra Bose who went from Germany to Japan by sub-marine. The book is a mine of information, but the tendency of the author to repeat, or go back in time whilst giving the narrative of an operation makes for somewhat tedious reading in places. The author however, has to be complimented on his herculean labour in going through all official records and documents to produce a readable account of the war at sea as seen through Australian eyes. Certainly necessary reading for naval officers who take their profession seriously on those interested in India's maritime problems as this book treats with the Indian Ocean problem as seen and tackled in World War II. A must for all naval libraries.

THE BRITISH SEAMAN 1200-1860: A SOCIAL SURVEY by Christopher Loyel (Published by Collins, London, 1968) Pp 319, Price 45s

TERY little, relatively, has been written about the British Seamen as an entity. There are hundreds of books about the great English maritime figures like Nelson etc. but very little about the unknown sailor without whom there could have been no Drake or Colling wood. Most people have hazy impressions about the very early history of the sailors of the British Maritime Forces. Manning & recruiting in the early days is associated with the operation of the "press-gangs". This book covers the subject from the middle ages to the time of the first steamship appearing at sea.

It is really a social study of the progress of the merchant naval seaman during this period. The various joys, sorrows of the sailor during the passing ages the human & service problems. It is interesting reading to see the development from the earliest days when people were impressed to man the Kings Ships to the eventual establishment of the standing naval forces & the regulated merchant marine, as we understand it in modern terms. The progress of medicine, victualling and uniforms etc. afloat. Very little is known to the lay man, about the minor characters, who in themselves were miless tones in the progress of the Royal Navy like "Bottomless Bag" a one time victualling officer is an intriguing, figure, as also the gunner who became a Quaker and refused to fire the guns in case blood were spilt. The herculean labours of Pepys' to produce a stable and regulated Royal Navy.

The book makes interesting reading, and is illustrated with copies of old prints which certainly give added charm to the book. Much labour and research has put in by the author in the preparation of this book, he had dealt with the subject with sympathy & wit. A useful and interesting book to have in a naval library.

KAY

DELHI CAPITAL CITY

by Asok Mitra

(Published by Thomson Press, New Delhi, 1970) Pp 129, Price Rs. 18.00

R. Ashok Mitra's book, Delhi, Capital City, does not pretend to be anything but a sociologist's study. One can read it in less than half an hour; but it is not a book which one treasures, keeps in a special place on the shelf to re-read.

What makes a city tick, particularly a capital city like Delhi? The snippets of Delhi given by Nirad C. Chaudhuri, for instance, or by that

proliferous writer of newspaper 'middles' Raj Chatterjee, provide scintillating, tittilating reading and more interesting glimpses of how Delhi has changed and it is from the changes that you feel history.

To quote another instance, Ian Fleming gives you more intimate insights into say, the West Indies in his James Bond series than any historian and the impressions remain.

The name of Curzon Road may have been changed to Kasturba Gandhi Marg, but Curzon is part of Indian history, as much as Akbar, while Kasturba comes in only casually as the wife of a great leader.

Immaculately groomed Sahebs may no longer hunt the fox on the Ridge whose loneliness is now shattered by the roar of trucks or the Civil Lines and Lutyen's New Delhi itself recapture the leisured culture of a Colonial era.

This writer has lived longer in Delhi than Mr. Mitra and am an immigrant and perhaps like all immigrants more loyal than the King to Delhi, more attuned to the nuances of the changes the Delhi has seen since the early, forties.

I have seen British troops with sten guns in the centre of Connaught Place park on Quit India Day on 9 August 1942, of British police sergeants crowding people off the corridors.

Old residents would remember the British V-Day Parade when tanks rumbled past Connaught Place while in the park, crowding the rails, Congress demonstrations shouted 'Quit India' and a British Colonel in one of the tanks saluted a particularly vociferous one.

I have seen Nehru in the Indian Coffee House (now no longer there) on the then Queensway (Janpath) along with friends, Nehru addressing a public meeting in the centre of Connaught Place where British troops had trained sten guns on the people on Quit India Day.

And 15 August 1947: 'The crowds round Parliament House, of Lady Mountbatten in the coach-and-four greeting the crowds—but the horses bolted and she went down plump into the seat, and she laughing to cover her embarassment'.

And the incredible thing on August 15—the rather complete lapse into indiscipline in the capital; it was as if a very severe boss had passed away and the employees were heaving a sigh of relief—which perhaps may be a good comparison. The disciplined Delhi Police of the British days lapsed into shoddy dress; the belts of some were missing; their spick and span character was off; their background of British training seemed to have disappeared overnight.

And more recently, the self-immolation over the Hindi issue before Parliament, the almost regular demonstrations and the riots and fires in Parliament Street on that fateful day in 1966 (was it?).

Where are all these in Mr. Mitra's book? He has looked at from the town planner's point of view which cannot provide many vignettes of the history of a city. Statistics are a necessary evil of today and the book does not lack them. Much labour has gone into it.

"The Delhi of today is described by him: 'Persian and Urdu having lost ground since 1947, the essential cultural character of Delhi is undoubtedly Jat, with its boundless self-assurance, industry, rude good health and optimism'."

ATC

JOIN

UNITED SERVICE INSTITUTION OF INDIA

(Founded 1878)

For the furtherance of

INTEREST AND KNOWLEDGE IN THE ART, SCIENCE AND LITERATURE OF THE DEFENCE SERVICE

For particulars, write to

Secretary, U.S.I.
KASHMIR HOUSE
KING GEORGE'S AVENUE
NEW DELHI-11

CORRESPONDENCE

Correspondence is invited on subjects which have been dealt with in the Journal or which are of general interest to the Services.

To

The Editor
Journal of the United Service Institution of India
New Delhi-11

ARMY AIR CORPS..AND ALL THAT

Dear Sir,

Quite a lot appears to have been written on the subject of the Army Air Corps by your correspondents Gp Capt K ADVANI, Col HS SIHOTA and Major ATMA SINGH. It further appears that the discussion on the subject has finally developed into an altercation. It is, perhaps, to put the lid on such an unsavoury development that "Fanga La" has brought out a very thought-provoking article (published in your Oct-Dec 71 Issue) under the very clever heading: "What's wrong with Our Army—Air Cooperation"—clever, in the context of such raging wordy broadsides as those of your correspondents mentioned above.

Any comment on the subject, by an onlooker, would project itself best only within the crucible of Fanga La's mature exposition of the core of the subject. The salient features of the subject are, under the existing circumstances, that (a) we just cannot afford an Army Air Corps financially, and (b) all that is required to improve the efficiency of our army—air cooperation is to activate and practise the concept of joint operations a bit more purposefully.

The doctrine of Joint Operations is propounded and taught in our Joint Air Warfare School (JAWS). Having had the privilege of being an Instructor in this very likeable Institution (1961-63) and dealing intimately with the Offensive Support aspect of the Air Operations, I feel I should recall, for the benefit of your readers, some of the important points that were raised in the tutorial discussions:—

- (a) The Air Force must realise that the surface forces (Army and Navy) do need air support for the success of their respective operations.
- (b) The surface forces, on the other hand, must realise that the Air Force functions under heavy strain during active operations and, with our limited national resources, all the air effort required by the surface forces may not be forthcoming at all times.
- (c) The fighter pilots and the surface liaison officers (eg GLO of the Army) must understand each other's "environment"—the real worm's eye view, so to speak.

For example, in order for the pilot to understand what a Div HQ down to a platoon position looks like, arrangements must be made for batches of pilots to spend some time with the ground troops—right down to platoon level—during training exercises or even during periods of inactivity in the field areas. This should be followed up immediately by flights over the same area to see how these ground positions look to the pilot from the air. Similarly, the GLOs should be arranged to fly over the ground positions to see how they look to him from the air. Thus, when the time comes for briefing and target indication, the pilot and the GLO would be talking the same language, as it were.

Regarding the point about Fighter Pilots conducting artillery shoots, even in the Second World War, there used to be a system, styled as "Artillery Reconnaissance" (Arty R) by which pilots of fighter aircraft did conduct artillery shoots from an orbital position over the target area deep in the enemy territory. So, there shouldn't be much difficulty in getting our present-day pilots to do the same. The Army Signals provided separate radio communications for this purpose (Arty R Tenders) and there was a separate radio telephony procedure for use between the pilot and the gun position.

It is, therefore, most essential that the Army and the Air Force should follow Fanga La's advice and try and improve the efficiency of the army—air cooperation, as also the tools of trade of the offensive air operations with particular reference to Photographic Reconnaissance and Photo Interpretation. As for Tac R Broadcasts, Fanga La's suggestion of broadcasting the texts over the All India Radio merits active consideration. In fact, this was actually practised during a two-sided exercise, with a transmitter of the Signal Regiment. These improvements should not be difficult at all, what with the increasing impact of the JAWS on the one hand and the close personal relationships that do exist among our present-day younger crop of officers of the three services on the other; what is the National Defence Academy good for, otherwise?

27 Andhra BN, NCC Chittoor (A.P.) 17 May 1972

Lt. Col. D. Asirvadam Signals

SECRETARY'S NOTES

BARL THE PUBLISHED

MEMBERS' ADDRESSES

Copies of the Journal posted to members are sometimes returned undelivered by the Post Office with remarks such as 'the addressee has been transferred', etc. This appears to be on the increase and the only way to rectify it is for members to drop a line to the Secretary whenever their addresses change due to promotion, transfer, etc. It is of the utmost importance that the Institution should have the up-to-date addresses of all its members.

ANNUAL SUBSCRIPTION

Although the Institute's year 1972 is now six months old, I regret to say that there are still many members who have not yet paid their subscription which was due on 1st January. Could I therefore request all members who have not yet paid their subscription for the current year, to let me have their remittance by return of post.

NEW MEMBERS

From 1st April 1972 to 30th June 1972, the following new members joined the Institution:

ABRAHAM. Major J.V.

AGARWAL, Major K.C.

AHLUWALIA, Captain B.S.

AHLUWALIA, Major J.S.

AHLUWALIA, Major S.S.

AHMED, Major M.

AHUJA, Major L.K.

Ahuja, Major N.S.

AJMER SINGH, Major

ALI, Captain M.S.

AMARJIT SINGH, Major S.D.

AMBKE, Captain S.S.

ANAND, Captain L.K.

ANIL KUMAR, Major

in a rolling in a

ANTAL, Plt. Offr U.S.

ASHOK KUMAR, Major

ASHUTOSH MATHUR, Major

ASHOK SODHI, Captain

ASHOK SURI, Major

AULAK, Major S.S.

AVTAR SINGH, Major

AWASTHY, Major P.N.

AWASTHI, Major R.K.

BABU, Captain M.M.

BACHITTAR SINGH, Major

BADGET, Major B.K.D.

BAHL, Major Y.

BAHL, Captain Y.K.

BAJAJ, Major J.K.

BAJWA, Captain G.S.

BAJWA, Major J.S.

BAKSHI, Major R.N.

BAKSHI, Lt Col V.P.

BAL, Major N.P.S.

BALASUBRAMANIAN, Major K.

BALBIR SINGH, Captain

Balse, Sqn Ldr S.S. BANERJEE, Sqn Ldr M.L. BAROOAH, Major B.K. BASSON, Captain J.S. BASWANI, Major D.S. BATRA, Major O.P. BATRA, Major V.B. BAVEJA, Major, P.N. BEDI, Captain K.S. BEDI, Major J.D.S. BEDI, Captain T.C. BEHL, Major T.S. BEHL, Major N.S. BHADATRIA, Captain B.R.S. BHAGI, Major B.M. BHALI RAU, Major M.B.. BHANDARI, Major K.S. BHANDARI, Major P.S. BHANI RAM, Major BHARAT BHUSHAN KOHLI, Captain BHATIA, Major M. BHATIA, Major P.P.S. BHATIA, Captain R. BHATIA, Flt Lt S.M. BHATIA, Major S.P. BHATIA, Major T.D. BHATTACHRIEE, Wg Cdr B.B, BHATTACHARYA, Major B. BHATTACHARYA, Major G.C. BHATTACHARYA, Major S.K. BHASKAR, Major V.K. BHULLAR, Major O.S. BHUPINDER SINGH, Major BHUTANI, Major H.K. BISHAN SINGH, Major (Life) BISHT, Captain G.S. BRAHMANAND, Major BRAR, Captain H.S. BRAHMI, Major R.K. CHADHA, Major S.L. CHAHAL, Captain M.S.

CHAHIL, Flt Lt P.S. CHANAM, Major I.S. CHAND, Major S.M. CHANDPURI, Major K.S. CHANDRASEKHARAN, Captain C.S.N. CHARAN, Captain R.M. CHATTERJEE, Commander B.C. CHATURVEDI, Major A.K. CHATURVEDI, Captain N.K. CHAUDHURY, Major P.C. CHAUDHRY, Major R.K. CHAUHAN, Captain A.K. CHAUHAN, Major D. CHAWLA, Captain M.H. CMEEMA, Major H.S. CHETTY, Captain B.R. CHHABRA, Major M.S. CHHETRI, Major B.S. CHHIBER, Major P.K. CHHIBBER, Sqn Ldr S.C. CHOHAN, Major S.K. CHOPRA, Major P.K. CHOPRA, Captain R.S. CHOUDHARY, Major K.S. CHOUDHRY, Majyr S. CHOUDHURY, Flt Lt. M.S. CORNELIUS, Major B. DAHIYA, Major S.S. DALTON, Captain J.T.S. DAMODARN, Captain K.A. DANG, Major K.S. DAR, Captain V.K. DARSHAN SINGH, Captain DATE, Flt Lt P.G. DATTA, Major A.P. DATTA, Major R.S. DAVENDRA SINGH, Captain Deo. Captain Y.P.S. DESHPANDE, Major S.W. DEV. Major P.K. DEWAN, Major A.K.

DHADWAL, Major S.K. DHAKA, Captain B.S. DHAKA, Major M.S. DHAKRA, Captain R.K. DHALL, Major D.S. DHALIWAL, Major D.S. DHARMINDER SINGH, Major DHARNI, Major P.N. DHAWAN, Major D.K. DHIR, GP Captain N.N. DIDAR SINGH, Major DILBAGH RAI, Major DIWAN, Major A.K. DIWAN, Sqn Ldr P.D. Dogra, Major S.L. DOGRA, Major S.S. DUA, Major H.C. DUA, Major S.C. DUGGAL, Lt Cdr R.P. DWARKANATH, Captain EAPEN, Major P.K. EMANUEL R FERNANDES, Gp Captain FAROOK BULY, Major FERNANDES, Captain A.F. GANDHI, Captain I.D. GANAPATHY, Major A.T. GAUR, Captain V.K. GHOSH, Major A.M. GIAN SAGAR, Captain GIDDA, Flt Lt B.S. GILL, Major B.S. GILL, Lieut B.S. GILL, Major H.S. GILL, Flg Off H.S. GILL, Flt Lt J.S. GILL. Major T.S. GLADSTONE, Major L.M. GOEL, Major H.V. GOROWALA, San Ldr S.K. GOTHRA, Major G.S. GREWAL, Captain G.S.

GREWAL, Major R.S. GREWAL, Major S.S. GUJRAL, Flt Lt G.S. GULATI, Major P.K. GULATI, Major S.K. GULATI, Major S.P. GULERIA, Major R.S. GUNDUR SINGH SIDHU GUPTA, Flt Lt K.L. GUPTA, Captain P.I. GUPTA, Captain R.C. GUPTA, Major S.N. GUR, Captain H.S. GURBAKSH SINGH, Captain GURHA, Major S.G. HADA, Major D.S. HANNURKAR, Captain A. -HARDEEP SINGH, Major HARDIAL SINGH, Captain HARIDAS, Sqn Ldr P.S. HARINDER SINGH, Captain HARINDER SINGH, Flt Lt HARJIT SINGH, Captain HARJIT SINGH, Major HARTEJINDER SINGH, Major HARREH SINGH, Captain HEM RAJ, Captain HOODA, Captain R.K. HOODA, Major S.K. HOSHIAR SINGH, Major HOSHIAR SINGH, Major (Life) INDER SINGH, Commander INDERJIT KASHYAP, Major INDER PURI, Sqn Ldr JAKSON, Major H.I. JAGJIT SINGH, Captain JAG PHOOL SINGH Major JAIDHA, P.C. Col. JAI SINGH, Major JAI SINGH, Major JAIN, Captain M.K.

JAIN, Major A.K. JAIN, Captain P.C. JAIN, Major S.M. JAKHER, Flt Lt B.S. JAKHMOLA, Captain A. JAMWAL, Major J.S. JAMWAL, Major M.S. JAMWAL, Major S.S. JASBIR SINGH, Major JASBIR SINGH, WAAN JATIBS PATEL, Major JAURA, Captain J.S. JITENDRA SINGH, Major JOHN TAYLOR, Captain Joseph, Major C. Joshi, Flt Lt G.V. Joshi, Captain S.S. KAHLON, Captain G.S. KAKKAR, Major B.R. KAKKER, Col A.S. KALHA, Major A.S. KALRA, Major S.L. KAMAT, Captain S.D. KANDA SWAMY, Flt Lt C. KANDIL, Major R.S. KANG, Captain J.S. KANG, Major J.S. KANITKAR, Major V.K. KANWAR, Captain B.R. KANWAR, Major H.S. KANWAR, Captain N.S. KANWAR, Major T.S. KAPOOR, Major S.K. KAPOOR, Major S.S. KAPOOR, Major V.K. KAPUR, Major M.S. KAPUR, Major V.N. KARAN SINGH, Captain Y. KARMARKAR, Fg Off V.H. KARNIK, Major V.S. KARNIK, Major M.D.

KARPE, Major M.S. Kashid, Major K.A. KASHYAP, Major R.K. KATARIA, Captain K.K. KATOCH, Major N.S. KATOCH, Captain Y. KAURA, Major Y.P. Kelkar, Flt Lt S.G. KHAJURIA, Major K.K. KHANNA, Flt Lt S. KHANNA, Major S.K. KHANNA, Major V. KHERA, Captain P.N. KHURANA, Wg Cdr M.L. KHULLAR, Major S. KIDAR NATH, Captain W. KIRAN KRISHNAN, Captain KIRPAL SINGH, Fg Offr KOHLI MANJIT SINGH, Major Kohli, Captain R.C. Kohli, Major Y.K. KOTHARI, Captain S.D. KOUNDAL, Flt Lt L.S. KRISHAN KUMAR, Captain KULDIP CHAND, Major KUNCHERIA, Captain K.K. KURIAN, Captain P.B. LABH SINGH, Major LAL GUDI GOPALASWAMI GANESAN, Sqn Ldr LAKHBIR SINGH, Captain

LALL, Major K.K.

LEKH RAJ, Major

LEBL, Major P.S.

MADHOK, Major D.B.

MADHOK, Major R.K.

MADHAN, Captain J.S.

MAGOTRA, Major S.C.

MADHAVENDRA SINGH, Lt

MOHAN, Major S.C.

LARARUS, Flt Lt D.

MAHLAWAT, Captain M.S. MAHENDRA PARTAP, Major MAHESH KHORANA, Major MAHESH VIJ, Major MALHOTRA, Captain R. MALIK, Major M.M. Malhi, Major A.S. MALHOTRA, Major B.R. MANKOTIA, Major B.S. MANOHAR RAJARAM, Lt Col MANN, Major S.S. Mann, Major V.S. MANN, Major H.S. MANGET, Captain P.S. MANGET RAI MALIK, Major MANKOTIA, Major B.S. MARIMUTHU, Major K. MASTER, Flt Lt J.J. MATTOO, Major R.J. MATHUR, Captain U.N. MAZUMDAR, Cdr S.D. MEHTA, Major C.M. MEHTA, Captain S.K. MEHTA, Major B.R. MEHTA, Major G.S. MEHTA, Sqn Ldr V.K. MEHTA, Major S.C. MAHESWARI, F.O. V.K. MOHINDER SINGH, Major More, Captain P. MOHAN, Major V.P. MOHAPATRA, Major V.N. MOWAR, Capt K.K. MOHKAM SINGH, Captain MOHAN CHANDER, Major MUKHTIAR SINGH, Major NAGPAL, Lt Comdr V.K. NAIR. Major G.R.K. NAIR, Captain R.G. NAIR, Major V.K.

NAKAI, Major S.S. (Life)

NANDA, Major N.S. NANDA, Captain N.P. NARAYAN, Captain L.S. NARAYAN, Major S.C. NARAYANA, Major M. NARENDRA SINGH, Major NARENDRA SINGH, Major NARENDRAN, Captain C.J. NARINDER SINGH, Captain NARULA, Major U.S. NATHAN, Major S.K. Nauriyal, Major B.B. NAYYAR, Lt Col A.K. NAZARETH, Major R.J. Negi, Major S.S. NEGI, Major S.S. NEGI, Captain B.S. NIJHAWAH, Major S.C. NIJJAR, Flt I.t K.S. NIMBALHAR, Major A.B. OBERRA, Major K P. Om Kakkar, Major OM PARKASH, Major Om Parkash, Major OM VIR SINGH, Captain PATEL, Major K.T. PANDE, Major R.C. PAWAH, Major A.N. PRATAP SHAUHER TEWARI, Captain PATTANAYAK, Major B. PRITAM CHAND, Major PURAN SINGH, Major PARMATMA SINGH, Captain PARIHAR, Captain N.S. PRITAM SINGH, Major PAI, Captain V.V. PANT, Major H.C. PURI, Major H.S. PADKE, Captain K.C. PATHAK, Major A.V. PILLAI, Major K.G.

PRADIP SINGH, Major PADHA, Captain K.C. PRADHAN, Major D.B. PHILIP, Major V.G. PHILIP SELVE MONDHARAN, Major PONNAM BALAM, Substantive Captain PREM CHAND, Major PILLAY, Lt B.H. PARMAR, Captain I.S. PATIL, Captain P.T. Posar, Major G.S. PREM KUMAR, Maj WJM RADHA KRISHNAN, Captain P.P. RAE, Major D.S. RAGHBIR SINGH, Captain RAJ KUMAR UPPAL, Major RAJINDER SINGH, Major RAJA, Major M.M.A. RAJENDRA PRASAD, Major RAJ VIR SINGN, Major RAMESH ARORA, Major RAM SINGH, Lt Col RAMESH WASUDEO, Major RAMESH, Flt Lt R. RAMA PRASAN, F.O.R. RAMA KANT SHARMA, Captain RAMANA, Flt Lt K.V. RAMESH DATAR, Major RAM PAL, Major S.K. RANA, Major S.C. RANDHAWA, Captain R.S. RANDHAWA, Major N.S. RANGA CHARI, Air, Cdr P.N.G. RANA, Captain R.S. RANBIR SINGH, Major RANDHAWA, Major D.P.S. RAO, Sqn Ldr N.V.N. RAO, Major D.V. RAO, Captain CA RAO, Flt Lt M.G. RANE, Captain S.S.

RATHORE, Major R.S. RATHNAM, Major S.M. RAVI KUMAR, Major H. RAVI KUMAR, Major H. RAVINDER SINGH, Captain RAVINDER SINGH, Major RAVI KANT, Major A.K. RAWAT, Major D.S. REDDY, Major D.A. (Life) REDDY, Captain S.M. REDDY, Major T.S. RIKHY, Major I ROHANKAR, Captain ROOP SINGH, Major ROMAL SINGH, Major Roy, Major S.K. Roy, Captain S.D. SACHDEVA, Major H.S. SAHOTA, Flt Lt K.S, SAHARIA, Major P. SAHNI, Lt Cdr A.L. SAIGL, Major V.P. SALWAN, Major R.D. SALKLAN, 2/Lt G.S. SAMBYAL, Flt Lt K.D.S. SAMUEL, Major M.P. SANDHU, Major S.S. SANAN, Captain G.K. SANDHU, Captain K.S. SANDHU, Major S.S. SAPRU, Captain B.L. SARWATE, Major A.K. SARIN, Lt Col J.C. SAREEN, Major R.P. SARIN, Major R.P. SATSNGI, Captain S.P. SATYEN, Flt Lt K. Gupta SATHE, Major A.V. SAWHNEY, Major J,S. SAYAL, Flt Lt P. SEGAT, Major L.N.

SEHRWAT, Major R.S.

SEKHON, Major S.P.S. SETHI, Major K.S.

SETHI, Captain S.S.

SEN, Major P.

SEHGAL, Captain H.L.

SETHI, Major A.K.

SETH, Major S.N.

SEKHRE, Major V.K.

SHAHANE, Captain A.P.,

SHARMA, Major K.B.

SHARMA, Major A.K.

SHARMA, Major S.C.

SHARMA, Major B.K.

SHEOPURI, Captain R.B.L.

SHERGILL, Major S.S.

SHARMA, Major A.K.

SHARMA, Captain K.L.

SHAMSHER SINGH, Major H.

SHUKLA, Major S.N.

SHANTA GAUTAM, Miss

SHARMA, Captain G.D.

SHARMA, Major J.P.

SHARMA, Captain M.R.

SHEKDAR, Major P.S.

SHARMA, Captain P.C.

SHARMA, Major H.C.

SHARMA, Captain H.D.

SHARMA, Major J.D.

SHARMA, Captain R.K.

SHARMA, Captain S.S.

SHARMA, Captain J.C.

SHARMA, Major P.R.

SHARMA, Major B.K.

SHARMA, Captain H.D.

SHARMA, Major S.D.

SHIVRAM, Captain R.K.S. (Life)

SINGH, Major K.N.

SHRIVASTAV, Major V.K.

SINGH, Captain S.P.

Singh, Major C.P.

SINGH, Major V.K.

SINGH, Major B.P.

SINGHA, Flt Lt C.M.

SINGH, Major R.C.

SINGH, JODHA, Major S.B.

SINGH, Captain S.K.

SINHO, Major S.R.

SINGH, Captain Y.P.

SINGHA, Captain H.S.

SIDHU, Major, K.P.S.

SIDDHU, Captain D.S.

SINGH, Major M.M.

SINDHU, Major O.P.

SINGH, Major A.B.

SIDDIQUE, Captain G.S.

SINHA, Captain P.K.

SINGH, Major J.P.

SINGH, Major A.J.

SINGH, Major M.K.

SHIVRAM, Captain R.K.S. (Life)

SINGH, Major N.T.

SINGH, Major S.P.

S. SIROH, Captain

SIDDIQUE, Major M.I.

SIVIA, Major J.S.

SINGH, Major N.B.

SINGH, Major P.B.

SIRSIKAR, Major I.S.

Sood, Major J,S.

Soin, Major K.P.S.

Soni, Major G.K.

SOHAL, Major C.S.

Sor, Major C.D.

SOWALKAR, Major S.V.

Srinivasan, Wg Cdr A.J.

SRIHARSHAN, Major M.K.

SRIVASTAVA, Sqn Ldr S.P.

SUDHIR KHERA, Captain

Suljan Singh, Major

Suri, Major Y.K.B.

SURRENDER MOHAN, Major

SUBBA, Major M.S. SUDESH KUMAR, Major SURINDER KUMAR, Major SURENDRA KUMAR, Flt Lt SUD, Major S.M. SUNEAL MALIK, Captain SUNDD, Major R.K. SURI, Major D.S. SURENRASHAH, Major SURESH SATHE, Major SURAT SINGH, Captain SWARUP, Flt Lt C. SYALI, Major J.S. TALWAR, Major K.K. TALWAR, Major A.C. TALWAR, Captain B.M. TEJ PAUL SINGH, Major TEJ SINGH, Captain TEJINER SINGH, Major TEK CHAND, Sqn Ldr THAHRAAL, Major S.K. THAKUR, Major R.C. THAPA, Major K.B. THAPAR, Major V.N. THAWANI, Lt. Col S.C. THIRUMURTHY, Captain M.V. THOMAS, Sqn Ldr K.V. TYAGI, Captain Y.P. TIWARI, Major V.M. UPPAL, Captain H.S. UPPAL, Captain S.P.S. UTHUP, Brig C.C. VADIVELA, Captain V.R. VASANT PATIL, Major VAZ, Flt Lt B.J. VELAYUDHAN, Captain K.P. VELAYUDHAN, Captain P. VARMA, Captain C.M.

VARMA, Major D. VARMA, Major G.K. VARMA, Major S. VEMBU, Captain, N. VEMURI, Captain N.B. VERMA, Major C.S. VERMA, Major C.L. VERMA, Major P.S. VERMA, S/L R. VERMA, Sqn Ldr S.K. VIJ. Major L.K. VIJ, Captian P.K. VIJ, Major R.K. VIJAI SINGH, Major VIJAY DUA, Major VIKRAM SINGH, Captain VINOD KUMAR . VIRENDRA KUMAR, Major VIRENDRA SWARUP, Major VISWANATHAN, Major A.P. VISWANATHAN, Major K. VISHWANATHAN, Major N. VIVEK UMESH MUNDKUR, Captain VOHRA, Major N.S. WADALKAR, Major S.G. WALIA, Major P.S. WASTRAD, Major R.G. WILLIAM, E Wendt, QMI YADAV, Flg Offr B.K. YADAV, Captain B.S. YADAV, Major D,R. YADAV, Major T.N.S. YADAVA, Captain N.L. YADAVA, Captain P.S. YADAVA, Major V.S. YASH MALHOTRA, Major YASH PAL GUPTA, Major YATINDRA KUMAR, Major

. Seven Officers' Messes and institutions were enrolled as Subscribing Members during this period.

ADDITIONS TO THE USI LIBRARY

Book No.	Author	Title
	MILITARY	SCIENCE
355.05	Dupuy, T.N.	The Almance of World Military Power, 1970
355.310942	Higham, Robin ed.	A Guide To Sources of British Military History, 1972
355.343	Cookridge, E.H.	Spy Trade. 1971
623.4519	Pretty, R.T. and Archer, D.H.R. ed.	Jane's Weapon System. 1971
623.74	Isaacs, Keith	Military Aircraft of Australia 1909- 1918, 1971
623.74	Jack Gee	Mirage: Warplane For The World. 1971
	WORLD WA	R II—1939-45
940.5318	Payton-Smith, D.J.	Oil: A Study of War-time Policy And Administration. 1971
940.5425	Toland, John	The Rising Sun: The Decline and Fall Of the Japanese Empire 1936-1945, 1970
	BIBLIO	GRAPHY
012	Sharma, Jagdish Saran	Jawaharlal Nehru: A Descriptive Bibliography. 1969
012	Sharma, Jagdish Saran	Mahatma Gandhi: A Descriptive Bibliography. 1968
	BIOGRAPHIES	AND MEMOIRS
923.154	Datta, Kali Kinkar	Rajendra Prasad. 1970
923.154	India. Information And Broadcasting (Min. Of—	President Radhakrishanan's Speeches And Writings, May 1964-May 1967 (Second Series). 1969
923.154	Singh, Nagendra	President Speaks. 1970

1	1	Λ
4	1	v

U.S.I. JOURNAL

923.254	Bose, S.K.	Surendranath Banerjea. 1968
923.254	Chandavarkar, G.L.	Dhondo Keshav Karve, 1970
923.254	Chandrasekhara, N.S.	Dewan Rangacharlu. 1968
923.254	Chandrasekharan, K.	P.S. Sivaswami Aiyer. 1969
923.254	Dasgupta, Hemendranath	Deshbandhu Chittaranjan Das. 1969
923.254	Dutt, R.C.	Romesh Chunder Dutt. 1968
923.254	Ghose, Benoy	Iswar Chandra Vidyasagar. 1971
923,254	Ghosh, Prafulla Chandra	Mahatma Gandhi: As I Saw Him. 1970
923.254	India. Information And Broadcasting (Min. Of—	The Collected Works of Mahatma Gandhi. V. 43 and V. 45. 1971
923.254	Jagadisan, T.N.	V.S. Srinivasa Sastri. 1969
923,254	Jog, N.G.	Lokmanya Bal Gangadhar Tilak. 1970
923,254	Masani, R.P.	Dadabhai Naoroji, 1960
923.254	Menon, K.P.S.	C. Sankaran Nair. 1967.
923.254	Mody, Homi	Pherozeshah Mehta. 1967
923.254	Nanda, B.R.	Motilal Nehru. 1970
923.254	Nizami, K.A.	Sayyid Ahmad Khan. 1966
923.254	Noorani, A.G.	Badruddin Tyabji. 1969
923.254	Saklatvala, B. Sh and Khosla, K.	Jamsetji Tata. 1970
923,254	Sengupta, Padmini	Deshapriya Jatindra Mohan Sen- gupta. 1968
923.254	Setalvad, M.C.	Bhulabhai Desai. 1968
923.254	Sinha, Bagishwar Prasad	Sachidananda Sinha. 1969
923,254	Sinha, Sasadhar	Asutosh Mookerjee. 1970

BANGLA DESH

327.540547	India. Information	Bangla Desh and	Indo-Pak	War:
	and Broadcasting	India Speaks at the	UN. 1972	19.0
	(Min. Of—			

India. External Affairs (Min. Of—	Bangla Desh: Documents, 1971	
IND	IA	
Dagli, Vadilal	Indo-Soviet Economic Relations— A Survey. 1971	
India. Information and Broadcasting (Min. Of—	The Fourth Plan: Mid-term Appraisal.	
India. Planning Commission Jindal. S.L.	Encyclopaedia of Social Work in India. 3 Vols. 1968 Flowering Shrubs in India. 1970	
Havell, E.B.	The Ancient and Medieval Architecture Of India: A Study of Indo-Aryan Civilization. 1972	
Havell, E.B.	Indian Architecture.	
Rapson, E.J. ed.	Cambridge History of India. Vol. I—Ancient India. 1968	
Sharma, Jagadish Saran	India's Struggle For Freedom. 3 Vols.	
	Vol. I 1962	
	Vol. II 1965	
	Vol. III 1965	
Dash, Shreeram Chandra	Orissa. (States of Our Union). 1970	
Chaturvedi, J.P.	Uttar Pradesh. (States of Our Union) 1970	
Saraswat, H.C.	Himachal Pradesh. (States of Our Union) 1970	
India. Information and Broadcasting (Min. Of—	Kerala. (States of Our Union) 1968	
Jagadesan, T.D.	Andhra Pradesh. (States of Our Union) 1969	
NEI	PAL	
Brown, Percy	Picturesque Nepal	
PAKISTAN		
Varma, S.P. and Virendra Narain	Pakistan: Political System In Crisis. 1972	
	Affairs (Min. Of— IND Dagli, Vadilal India. Information and Broadcasting (Min. Of— India. Planning Commission Jindal. S.L. Havell, E.B. Havell, E.B. Rapson, E.J. ed. Sharma, Jagadish Saran Dash, Shreeram Chandra Chaturvedi, J.P. Saraswat, H.C. India. Information and Broadcasting (Min. Of— Jagadesan, T.D. NEI Brown, Percy PAKI Varma, S.P. and	

TIBET

015 15	Dalas	
915.15	Dakpa, Richen and Rooke, B.A.	In Haste From Tibet. 1971
915.15	Woodcock, George	Into Tibet: The Early British Explorers. 1971
951.5	Franck, A.H.	Antiquities of Indian Tibet Vol. II- The Chronicles of Ladakh and Minor Chronicles 2 Vols. 1972.
	SOUTH E	AST ASIA
959	Kirk, Donald	Wider War: The Struggle For Cambodia, Thailand, and Laos. 1971
959.5	Barber, Noel	The War of the Running Dogs: How Malaya Defeated the Com- munist Guerrillas 1948-60, 1971
959.7	Haviland, H. Field and Others	Vietnam After the War: Peacekeeping and Rehabilitation, 1968
959.7	Pike, Douglas	The Viet-Cong Strategy of Terror. 1970
314 7/6	WEST	ASIA
327.56	Hirschmann, Ira	Red Star Over Bethlehem: The Soviet Influence in the Middle East. 1971
956.94	Louvish, Misha and Zurock, Mordekhai	Facts About Israel, 1971
956.94	Palsokar, R.D.	Arab Israeli Campaign 1956. 1971
962.15	Love, Kennett	Suez: The Twice Fought War. 1970
e muse i assi	EUROPE	
354.42	Parkinson, Roger	Peace For Our Time: Munich to Dunkirk the Inside Story, 1971
U.S.A.		
327.73051	Gupta, D.C.	United States Attitude Towards China. 1969
327.73051	Tuchman, Barbara W.	Sand Against the Wind: Stilwell and the American Experience in China, 1911-45, 1970
	. U.S.	S.R.
327.47	Zimmerman, William	Soviet Perspectives on International Relations 1956-1967, 1969

ON 5-YEAR Interest up to Rs. 3000 in a year including

POST OFFICE TIME DEPOSITS

interest on other taxable securities and deposits is FREE OF INCOME-TAX.

ASK YOUR POST OFFICE FOR DETAILS

NATIONAL SAVINGS ORGANIZATION





IU S II

(Estd. 1870)

OUR ACTIVITIES

Library Service

ONE of the oldest and finest military libraries in India, today it has over 17,000 books some of them dating back to 16th and 17th centuries. The Library continues to supply books to members outside Delhi by paying postage one way—a unique service which U.S.I. is proud to render in the cause of promoting the study of Military Art, Science and Literature.

Correspondence Courses

THE introduction of correspondence courses for promotion and Defence Service Staff College examinations some years ago found ready response and today the Institution has 1,200 members who participate in the Training Courses. Material is despatched to them regularly. wherever they may be.

The students have undoubtedly profited by these courses, as evidenced by the success achieved by them in these examinations. Popularity apart, the courses contribute substantially to the revenue of the U.S.I.

U.S.I. Journal

OLDEST Journal in India, it contains proceedings of lectures and

discussions, prize essays, original articles, book reviews, etc.

It is published quarterly in April, July, October and January each year, (the first issue being Jan-March each year). The Journal is supplied free to members. It provides a forum for the most junior officer to express his opinions relating to his profession.

Gold Medal Essay Competitions

THE gold medal essay competition is held every year. The subject for essay is announced during the month of March each year. On the occasion of the Centenary, an additional Gold Medal Essay Competition has been instituted for Junior Officers of not more than ten years' service.

Lectures and Discussions

A series of lectures by outstanding experts on service, international affairs and topics of general interest to the services are organised for the benefit of Local Members in Delhi.

MacGregor Medal

This medal is awarded every year to officers for any valuable reconnaissance they may undertaken.

Rules of Membership

1. All officers of the Defence Services and all gazetted officials shall be entitled to become members, without ballot, on payment of the entrance fee and subscription.

Other gentlemen may become members if proposed and seconded by a member of the Institution and approved by the Council. They will be entitled to all privileges of membership except voting.

2. Life members of the Institution shall be admitted on payment of

Rs. 160/- which sum includes entrance fee.

3. Ordinary members of the Institution shall be admitted on payment of an entrance fee of Rs. 10/- on joining and an annual subscription of Rs. 10/- to be paid in advance.

For further particulars, write to Secretary, USI, Kashmir House,